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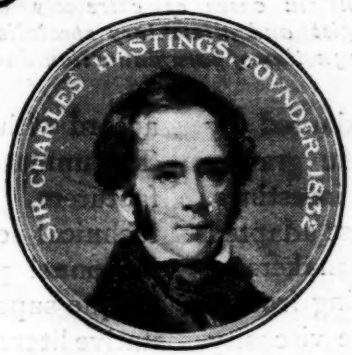

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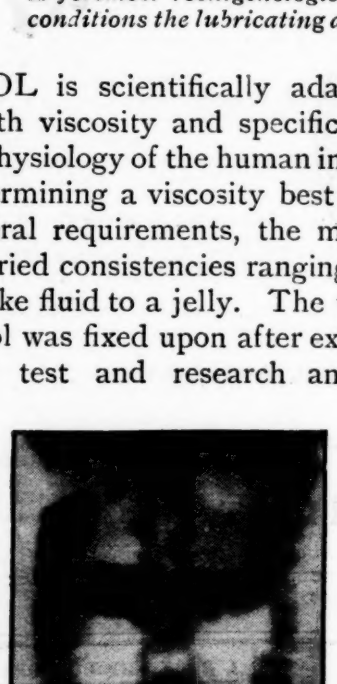

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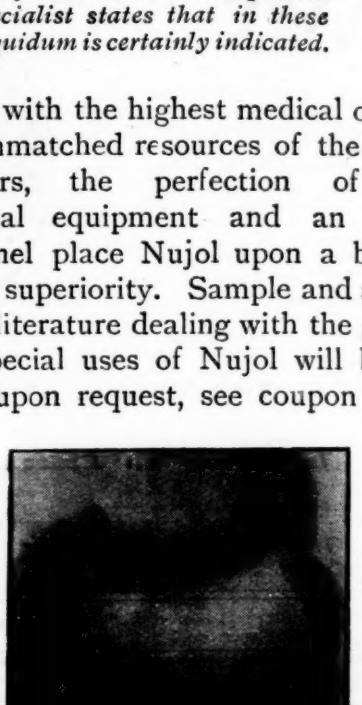

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BY

W. J. TYSON, M.D., F.R.C.P., F.R.C.S.,

HONORARY PHYSICIAN, ROYAL VICTORIA HOSPITAL, FOLKESTONE.

Prognosis in Heart Disease.

JUST NOW there is reason to avoid going from one extreme to the other. Murmurs are not all innocuous, as some seem to imply, but vary in character, and also as to which valves are involved. What is important is this: How does the heart act? Are there any signs or symptoms? If there are not, then the less a patient knows about his heart the better it is for him. In my opinion the presystolic murmur ranks first in seriousness; after this the aortic (regurgitant); and the most favourable is the systolic mitral—all referring to the left side of the heart. Again, all these murmurs must be considered in conjunction with the state of the wall of the heart.

The sinus irregularity of children, associated with the respiration, which at one time produced so much mental anxiety among doctors and patients, need not disturb us. The extra-systoles, easily detected, are not prognostically bad; these are generally missed pulse beats, seen mostly in old people.

The effect of cardiac diseases is really to be gauged in its extent by how much the ventricular action is affected. The most important cardiac irregularity is auricular fibrillation. Its constant association with the presystolic murmur makes this latter of serious importance; it also occurs in the cardiac sclerotic changes of elderly people.

The very slow pulses of old people, often accompanied with insensibility, and even fits, which we have all seen, are now known to be due to heart-block, the condition, of course, varying with the amount of disease in the auricular bundle obstructing the stimuli from auricle to ventricle. In the young the heart disease is generally rheumatic in origin; although the prognosis is good, still this must depend on the ventricular efficiency, tested by physical exertion. In middle life and onwards cardiac disease is due to degenerative changes in the musculature of the heart.

Of all drugs digitalis holds its own, but after this ranks theocine-sodium acetate; both are most useful when auricular fibrillation is present. It is generally thought that the value of digitalis consists almost entirely in slowing of the pulse, the drug having no effect on the left ventricle, but only on the vagus nerve, affecting the supraventricular tissues.

The Relief of the Right Heart.

There is no doubt that the heart is more often auscultated than percussed—in other words, the valves are more thought of than the muscle; also, the left side receives more attention than the right. This probably is as it should be, but there are times when the right side of the heart, especially the auricle, demands our thought and skill. When we are dealing with diseases such as pneumonia, valvular or muscular disease of the left heart, it is well to examine by percussion the size of the right auricle. Now there is not much difficulty in detecting an enlarged right auricle; the normal dullness of one fingerbreadth to the right of the sternum in the fourth interspace is increased to two, or perhaps three, fingerbreadths; the ordinary finger percussion is quite sufficient for all practical purposes. When this enlargement is discovered, then local depletion by means of a few leeches—three to six—is decidedly valuable. I have seen cases where, after application of leeches, the distress has been almost at once relieved; it is then that the action of digitalis and strychnine can have full play, for it is bad treatment to begin with heart tonics before the heart congestion is relieved, and often, also, before the alimentary canal is purged.

*Delivered at Carmarthen on Wednesday, April 11th, 1923, before the members of the South-West Wales Division.

Treatment of Acute Diarrhoea in Children by Saline Injection.

Acute summer diarrhoea in children is one of our greatest anxieties. I am not speaking of the comparatively mild cases which yield to ordinary remedies and dieting, but to those collapsed conditions in which sickness and constant diarrhoea are both present, and which are found mostly among the classes that live in poor and crowded thoroughfares. These cases, when possible, should be admitted as in-patients for hospital treatment; here alone can they be kept properly clean and fed, and in a thoroughly ventilated room. If we can manage to prolong life for a few days, recovery will frequently follow. It is often most difficult at first for the baby or child to keep down any food at all. It is in this condition that saline injections, given either by the skin or bowel, are of great and saving value. The injections must be given slowly and continuously.

Pleuritic Effusion.

When the right or left chest is three-fourths full of fluid or more, then aspirate or tap. I have seen two or three people die from simply sitting up in bed when one side of the chest was full. When the quantity of fluid is less than three-fourths there is no necessity for immediate action—in fact in a few days the fluid may not only diminish, but soon entirely disappear. There are two dangers in withdrawing the fluid—namely, a sudden acute congestion, or oedema of the compressed lung, producing an albuminous or serous expectoration in large quantity, resulting in serious obstructive breathing. The cases like this which I have seen have recovered, but fatal ones have been recorded. Again, the mere tapping or aspirating has resulted in immediate death. It is not wise to draw off the whole of the fluid, for the reason that when doing so syncopal attacks are apt to occur. The most common condition mistaken for an effusion is a chest tumour, which is generally malignant in character, but here the heart and other organs are not displaced.

Two other diseases may cause difficulty—namely, aneurysm of the thoracic aorta, and a hydatid cyst. It may be fatal to aspirate either. It is generally believed that the effusion is of a tuberculous origin; whether this be so or not, in my opinion a large proportion of these cases get well, and remain so. I do not remember seeing a serous effusion become purulent; when it is purulent it is so from the beginning. I know of no sign or symptom to distinguish between a purulent and a serous effusion—of course, one may make a shrewd guess. The temperature does not help us.

The Mania following Pneumonia.

I am not now referring to the ordinary delirium, or "delirium febrile," a delirium, as its name implies, which may come on in any case with high fever. Pneumonic delirium is not common, and it is often associated with the apical form. Perhaps one of the most interesting and practical points is that the delirium may be the first symptom noticeable in the disease—that is to say, the physician is called to see a case of delirium, and on examination of the lungs he discovers pneumonia. In young children this delirium has been mistaken for meningitis. The pneumonia is generally of the sthenic type and occurs generally in comparatively young people.

But the cases to which I wish particularly to call attention are those in which the mania follows the pneumonia. I have had the opportunity of seeing three of these cases, but the literature is exceedingly scanty. I think the reason of this scarcity is mainly because these cases occur in the hands of private practitioners and so do not get recorded. The following are the characteristic points in this form of pneumonia mania:

1. The pneumonia is of the sthenic or classical type.
2. The people affected are mostly of a neurotic temperament.
3. It generally occurs in youngish people under 40 years of age.
4. It is associated with great sleeplessness, and there seems great difficulty in the treatment of this symptom.
5. It is not essential that the disease be very acute or that much lung be involved—in fact, the amount of lung involved does not seem to bear any relation to the amount or length of stay of the mania.
6. It occurs after the crisis. The delirium, already mentioned, which occurs early in the disease, is as a rule a much more severe type of mania than that which follows the crisis.

7. The pathology, I suppose, is toxic, but I am unable to say why some people suffer in this way and others do not.

8. The prognosis of this mania is good; it should be looked upon as part of the pneumonia, and should not be especially treated as a case of mania *per se*. The question of asylum treatment need not be considered. I mention this point because in one of my cases the doctor in attendance considered the mania should be treated in an asylum.

9. *Treatment.*—Perhaps the most important thing in this trouble is to treat the sleeplessness. Food is the best hypnotic, but it may be necessary to give some paraldehyde or some other narcotic. The bowels should be attended to. A tactful, wise, and firm nurse is a necessity, and convalescence should be carried out in the country.

On the Late Discovery of Physical Signs in Pneumonia.

The signs to which I wish to draw attention are dullness on percussion, bronchial breathing, and bronchophony, which, in my opinion, not infrequently occur, or rather are discovered, comparatively late in the course of the disease. The following paragraphs occur in two standard works on medicine:

"Usually up to the third day after the chill the percussion note over the affected part becomes dull, the respiration of a blowing character. Bronchophony now makes its appearance."

"On the second day a dullness more or less appreciable reveals itself in the part originally affected, and there are also heard in that situation anomalous signs which become more and more decided, such as a fine and very equal crepitant râle, heard during respiration."

These paragraphs show the generally acknowledged time as to the appearance of the physical signs of pneumonia. From observation of cases of croupous pneumonia that have come under my care, I believe that the physical signs, such as dullness on percussion, bronchial breathing, and bronchophony, occur later in the disease than is generally supposed; or perhaps it would be more correct to say that there is a larger percentage of cases with the above signs lately discoverable than our reading or teaching has hitherto led us to suppose. What this percentage is I am not prepared to say. The authors already quoted say further on in their articles on pneumonia that the characteristic physical signs of the disease may escape detection from the inflammation being confined to the central situation of the lung. Probably this explanation may account for the lateness of the appearance of the aforementioned signs. Yet, allowing that this explanation is the true one, it is nevertheless just as important for the welfare of the patient to diagnose a central pneumonia early as it is a peripheral one, for the one is as dangerous in its prognosis as the other. If this dullness, bronchial breathing, and bronchophony are not infrequently noticed late—for all authors admit that these signs are occasionally either overlooked or lately discovered—then it becomes necessary to diagnose pneumonia by symptoms instead of by signs. One of the authors before quoted says that if the patient has had a chill, pain in the side, rusty sputa, and high temperature, there is scarcely any room for doubt about the diagnosis, and even in central pneumonia these symptoms are generally present. If there is one symptom which is pathognomonic of the disease it is the pulse-respiration ratio—it is often in the proportion of 2 to 1. I know of no disease in which this ratio is so low.

Change of Type of Pneumonia.

I should say from my own experience that the sthenic or classical type of pneumonia is not so frequently met with as formerly. The type of pneumonia seems to have changed in character. Pneumonia seems often to be of a less local form, spreading often, and the disease ends constantly by lysis rather than by a crisis.

Abdominal Pain in Pneumonia.

In some cases of pneumonia, especially in children, pain in the abdomen, which is referred, has been mistaken for peritonitis—for example, appendicitis—and the abdomen has been opened for this symptom. It is wise always to think of this fact, and when in doubt to examine the chest. On carefully examining the abdomen, although at first tender, this soon passes off, and the whole of the abdomen can be successfully palpated.

Fresh-air Treatment of Acute Respiratory Diseases, with Special Reference to Pneumonia.

The open-air treatment of phthisis is well established, but the treatment of the more acute affections of the lungs, such as pneumonia, bronchitis, asthma, by this method is not well established. Oxygen is given, but there exists a good deal of doubt as to its efficacy—for the reason, perhaps, that it is too artificial in its manufacture, and, if of use, too intermittently given. Now, the natural atmosphere is always with us, and can be administered in large and constant quantities. May not the higher incidence of pneumonia in winter and spring be due, not so much to the cold weather, as to "the closer confinement of the populace indoors, in the stagnant air of living-rooms from which sunlight is excluded, and which tends to lower vitality and decrease resistance on the one hand, and to favour rapid multiplication and increased virulence of the specific poisons on the other"? (Anders.) Again, we have evidence that pneumonia is more prevalent in overcrowded districts and among the impoverished classes.

It seems to me that in a disease where nearly half of the breathing apparatus is out of gear it is hardly possible to have too much air, containing its full amount of oxygen. I treat these cases with free ventilation, or even on an open verandah exposed fully to the air. My experience is that pneumonic cases do better with this freedom of air rather than, as formerly, with a limited amount. I am not prepared to say that excessively damp air, or strong, cold east winds playing directly on the patient, is decidedly beneficial, but if the air is dry I doubt if the coldness is detrimental.

I should sum up the essential points in the treatment of pneumonia as (1) absolute rest; (2) appropriate feeding and stimulation; (3) sufficient, but light clothing; (4) sunshine, if possible; and (5) abundance of fresh air. The last point is the one most generally neglected, or perhaps forbidden by the patient and friends. I refer particularly to the more acute cases of the respiratory organs, but I have treated a fair number of subacute, and even chronic, cases, such as cases recovering from empyema, bronchiectasis, with or without purulent and offensive expectoration, etc., in open verandahs with the greatest success.

Acute Intestinal Obstruction due to Thrombosis of the Superior Mesenteric Artery.

The cases of the above have been more commonly reported abroad than in England. I have seen two cases. As they are rare and seldom diagnosed, the following points are interesting and useful to remember. The general symptoms and signs are very similar in character, whether the superior or the inferior mesenteric artery is involved. Certain differential points have been given; these do not seem of much value when practically considered, for in both intestinal obstruction is produced.

The first prominent symptom is abdominal pain, closely resembling an ordinary attack of colic. Nausea is frequent and arises fairly early. Vomiting follows, with a gradual change in the character of the vomit. Constipation is the rule, but diarrhoea has been often reported. Tension and tympanitic swelling of the abdomen are late signs indicating the advent of peritonitis. Extreme fetor of the stools, should there be diarrhoea, is of serious omen, and points to gangrene of the bowel having taken place. Profuse intestinal haemorrhage has also been recorded, and when meeting with this sign it is wise to bear in mind that embolus of the mesenteric artery may be the cause.

Prognosis is always most grave, but not absolutely fatal. Of course, this is better if only one branch of the artery is involved rather than several. If the main artery is occluded it is doubtful whether recovery has ever taken place. The greater the arterial obstruction the more severe the symptoms. As regards the source of the embolus, the left heart seems to be the most common one, and after this the abdominal aorta.

Thrombosis of the Superior Mesenteric Vein.

A few cases of this have been reported, giving rise to intestinal obstruction, the artery not being affected. Swelling of the bowel from infarcts occurred, and the tumour has been mistaken for one of malignant nature. Early abdominal section gives the only possible chance of recovery. I have not been able to find any recorded instance of recovery after delayed operation.

The Intestinal Origin of Convulsions.

In convulsions one must often look beyond the brain for the explanation and treatment. A boy, aged 2, was taken

almost suddenly with severe convulsions. I saw him soon after they had begun. They soon became almost continuous, and he appeared in a serious condition. On placing my hand on the abdomen I felt marked peristaltic action of the bowel. The convulsive attack was so tedious and violent in passing off that I gave some chloroform to check it. Some time later the bowels were opened four or five times, after which the convulsions ceased. There are many causes of convulsions in children, and intestinal irritation from undigested or ill-assorted food is among the most common.

Indigestion.

I know of no disease more difficult to diagnose than what is generally called indigestion. The difficulty mainly occurs after 50 years of age. Is the pain over the region of the stomach common indigestion—for example, hyperchlorhydria, or achylia gastrica, etc.—or has the patient a gastric or duodenal ulcer, or the beginning of malignant disease? I am not going to describe the textbook symptoms of the above; they are known to you.

The modern diagnostic methods of the examination by the *x* rays and bismuth meals, also the last method by fractional test meals, are both probably of more value in diagnosis than the common symptoms, but neither of them, in my opinion, can give a final definite opinion. Of course, where a "lump" can be felt, the consultant who is called in late in the disease may be the first to settle the dispute in question, but one should be anxious to know the trouble before the tumour is recognizable.

I was seeing a case in the country a few months back with a medical friend. We were speaking on the difficulty of diagnosing the cases I am mentioning, when he abruptly turned round and said, "I rarely allow a dyspeptic case to go on more than six months without recommending an abdominal exploration."

In looking back on my past experience I remember now many cases that it would have been better to have operated on, particularly gastric and duodenal ulcers, and malignant disease. Yet one must not forget that it is only comparatively recently that our surgeons have been fully equipped in all operative quickness and skill to deal successfully with these cases. Moynihans do not live in every town; still, they are becoming more common every day. Personally, where I can obtain this necessary surgeon, I feel more and more inclined to recommend this radical treatment of gastric ulcers and malignant disease in the comparatively early stage of stomach symptoms.

Albuminuria.

The ordinary textbook classification of Bright's disease—that is, acute Bright's disease, such as that which follows cold or scarlet fever, chronic tubular nephritis, or smooth kidney, whether large or small, or the granular and contracted kidney—does not by any means cover the cases of albuminuria which we meet with in private practice. I am not referring to those cases of cyclic or functional albuminuria which have often been described and which we know so well, nor to those conditions which follow temporarily specific fevers, nor to those associated with chronic congestive states of chest and abdominal organs. The cases that I am referring to occur in people who are for the most part pretty well; the albumin is almost constantly present, but not as a rule in large quantity.

I have seen a considerable number of albuminuric cases, some with hyaline casts and some without; they defy classification, and it is impossible often to prognose them; they occur at various ages between 30 and 70. Because you find albumin in the urine do not be in a hurry to class the case under one of the classical divisions of the disease. I am convinced that many of the patients live for years without ever having a granular kidney—certainly not a large white one.

I have lately described at the Royal Society of Medicine, and recorded in their *Transactions* of last year, a distinct class of albuminuric cases, which so far as I know have not been written upon before. A large quantity of albumin is present for many years, the quantity often amounting to absolute solidity on boiling. At times the albumin may entirely disappear. Four of these cases have come under my notice, at ages ranging between 50 and 75. There was no oedema or dropsy. In two there were attacks of insensibility, and at this time the albumin was at its maximum in quantity. Dr. Mackenzie Wallis, of St. Bartholomew's Hospital, kindly examined the urine for me in one of these cases, in which the ratio of albumin to globulin was 2 to 1. The globulin when isolated behaved like serum-globulin, and was quite different from the type met with in functional albuminuria.

Acute Glaucoma simulating a Bilious Attack or an Attack of Erysipelas.

Glaucoma has been mistaken for three diseases—namely, cataract, erysipelas, and a bilious attack. The inflammatory condition of the eyelids and integuments of the face have at times been so severe in acute glaucoma that the case has been diagnosed as one of facial erysipelas; or again, the sickness has been so prominent a symptom that it has to a great extent masked the increased eye tension, so that the latter has been overlooked and gone untreated. Such cases show the importance of teaching the chief practical points in all the specialties. It is not necessary, nor even desirable, that all men should be able to do expert operations, for most cases can wait and be handed on to more skilled fingers. But cases like the above should always be diagnosed early, in order that they be properly placed. Every doctor should be a general practitioner in knowledge, although he need not be so in practice.

The Value of Single Symptoms and Signs.

In the diagnosis of medical and surgical cases one must not forget to put proportionate value on each symptom and sign; it is not the number of these that tell in making a diagnosis, but rather the quality of each one. One sign or symptom may count more in giving our final opinion than five or six others. One often hears men saying that the majority of the symptoms are in favour of such a disease, whereas the minority symptoms may be of much more total value. It happens not unfrequently that one symptom or sign may determine our view to the exclusion of all others. Two examples will suffice: in pneumonia the pulse-respiration ratio ranks probably highest of all the symptoms, and is almost pathognomonic of the disease. In acute appendicitis the pulse and respiration should rarely if ever be trusted, whereas rigidity ranks very high and may be the only sign.

The Soporific Action of Mercury.

I am not aware that the soporific action of mercury in the class of case about to be described is at all generally known. The cases in which I have found blue pill—for this is the form of mercury I am referring to—give such good soporific effects are rather difficult to describe, and must be given in a more or less general way. Many men would call them cases of biliousness, and for want of a better term I am contented to use it provisionally. The patients, who are usually over 40, complain of lassitude, loss of appetite, a general fullness of the abdomen, pains in the shoulder-joints, a want of clearness of thought, more or less dull pain in the head, not confined to one particular spot, irritability of the skin, and, above all, of sleeplessness at night. The tongue is generally of a whitish-brown colour, there is a nasty taste in the mouth, and the eyes are rather "thick." There may be many more symptoms and signs than the above, or few of them may be present, but when the symptom of sleeplessness is prominent, then the soporific action of blue pill followed by saline draughts is peculiarly brought out.

The symptoms I have detailed are principally found under the heading of "bilious dyspepsia," but there is this important clinical difference: whereas sex, sickness of food, and want of exercise play leading parts in producing this particular form of dyspepsia, the cases that I have in mind are found as often—if not more often—in women as in men, and where the plainest diet and fair amount of exercise have been taken.

There is little doubt that sea air has something to do with

this state of health; people who have come down to the seaside after a long residence inland frequently develop, after a few days, all the symptoms described. I do not associate these cases with those which are commonly called "lithaemia," or the substitution of uric acid for urea as the final product of disintegration of albuminous substances within the body; in this last condition one finds the more remote symptoms of gout.

What is the exact action of mercury which brings about the happy result? I do not know, nor am I anxious to propose theories. Murchison supposed that mercury possessed a double action, for he says, whether or not the secretion of the bile was increased, more bile was certainly passed when the drug was being taken, and an eliminating action was brought about, so that less of the bile constituents were absorbed from the intestine than usually. Again, he supposed the albumin to be in some way more thoroughly disintegrated. In some such way the brain is "cleared." It is important for us to know empirically the use of a drug which will enable us to give a patient a good night's rest, whilst at the same time we are treating the origin of the trouble and apparently not giving ordinary soporific drugs.

The Danger of putting Old People to Bed.

Probably I shall be running atilt against someone's opinion when I say that I believe that many old people are sent to bed too early, and are kept too long in bed when they are convalescing. Of course, there are many obvious exceptions which will at once occur to you, and which I need not take up your time in mentioning.

I believe that we should be chary in advising old people to take to their beds when slightly ill. Some few years ago I was attending an old man of 80 with a slight attack of bronchitis, the like of which he had often suffered from before. A consultation was suggested, and the consultant called in advised my patient to go to bed. I remonstrated, but gave way to what I thought then was wiser advice than my own. The patient kept his bed for a week and then died. It may have been a case of *post hoc* and not *propter hoc;* still, my experience has since led me to believe that this man would have had a better chance of recovery if he had remained up during the daytime.

We must remember that the will power of old people is comparatively weak, and that bed to them is comfortable; then, when once in bed, after a few days the heart and muscular system lose tone. The effort to overcome the above is difficult, and sometimes impossible to obtain again. It often requires a good deal of courage to keep these old people from taking to their beds, for the patient often takes kindly to bed himself and the friends think you unkind in advising less rest.

My own belief, then, is that it is wise to keep old people about and with moderate exercise as long as possible.

Final Remarks.

I have finished.

I have often wondered, and at the same time regretted, why men who have been in practice many years do not record their experiences. Men who have been in general practice in the past have done great work. We think of Jenner, etc., and in modern times of Mackenzie.

Some years ago there was much more local record of cases made than there is to-day. In my own experience as Secretary of the East Kent District of the South-Eastern Branch of our Association, for six years we had regularly four meetings a year, with an average of four papers at each session, and with an average of twenty attendances. Things and times are changed. All the papers were written by our own members. Most of us who have been in practice for some years, whether hospital, private, or both, must have a vast experience well worth noting down. I have often said that young men write books, when they have little practice; old men, who know something, have little or no time. Personally I have seen in practice most of the rare diseases in medicine, many of which I have recorded.

We who live in villages and comparatively small towns see diseases often in their true perspective—the beginning, the middle, and the end of them.

HERPES ZOSTER OPHTHALMICUS.

BY

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THE eye has aptly been described as an elegant diminishing mirror of diseases of the body. Indeed, our ophthalmic experience of herpes zoster reflects so diffusely upon epidemiology, neurology, and dermatology that we can but select six arbitrary headings—etiology, pain, efflorescence, keratitis, complications, and treatment.

ETIOLOGY.

"In full fair tide let information flow—
That evil is half cured whose cause we know."
Churchill: *Gotham*, Book 2, 652.

In our infirmary practice the incidence of herpes zoster is approximately 1 in 10,000, but in many clinics it is rarer—for example, Colonel Elliot estimated its relative incidence at Madras at 1 in 25,000.

In twenty private cases the average age at the time of attack was 55. We see the disease in children occasionally, but note that as a rule only elderly patients experience persistent pain, extensive scarring, or severe corneal ulceration. We are indebted to Dr. Henry Head for a letter confirming our inference that ophthalmic zona is more prevalent in early life than ophthalmic statistics denote.

"Herpes zoster in children," he writes, "is almost a negligible disease. Were it not that the mothers are frightened of the rash we should see very few cases in young persons. The elasticity of the ganglia and surrounding parts probably prevents the occurrence of severe forms of pain. Notoriously, herpes zoster wherever it occurs is much more severe in old people than in young. This is particularly the case when the rash lies over the forehead."

Some authors report a preponderance of male patients, and state that the right side is more often affected than the left; in our own series the proportions were equal in both respects. The cases were entirely sporadic. In one instance a man and his wife were affected, but fourteen years intervened between the two attacks. Most of those affected were in good health and were engaged in active mental or physical pursuits prior to some temporary fatigue or minor indisposition, upon which herpes supervened.

In a case which followed carbonic oxide poisoning Sattler first described infiltration, destruction, and degeneration in the Gasserian ganglion. Poulard distinguishes three varieties of trigeminal herpes according to the position of the causative lesion: (1) a neuritic form, affecting the peripheral branches of the ophthalmic division; (2) a rhizomeric form, implicating the Gasserian ganglion; and (3) a metameric form, in which the lesion is in the pontino-medullary nucleus of the fifth nerve. In this nucleus, according to Bing, the frontal region is represented most distally, the temples and eyelids in an intermediate position, and the nose and cheeks highest up. In one or two of our cases anomalous eruptions occurred, for example, on the buccal mucosa, in addition to the eruption of typical rhizomeric distribution.

Netter states that herpetiform eruptions appear in at least 1 per cent. of cases of encephalitis lethargica, and cites a case reported by Medea of Milan, in which encephalitis was accompanied by supra-orbital herpes, followed by paraesthesia of the affected area. Numerous instances of chicken-pox arising in remote farms and isolated villages within twenty-one days of a case of herpes zoster have been recorded.[17] Again, Head and Campbell point out that herpes zoster may justly be described, both on anatomical and pathological grounds, as acute posterior poliomyelitis. Probably the virus of shingles, widespread in an attenuated form, is liable to enhanced virulence, when epidemics arise, and is sometimes inconstant in its affinity for the small bipoplar ganglion cells, irritation of which results in the

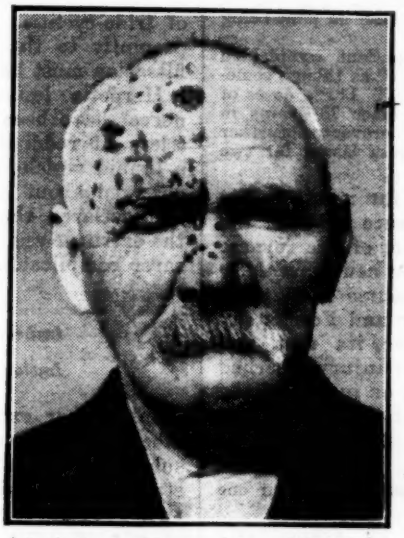
herpetic eruption. The effects of such irritation are the same whether it be due to a specific virus, or to local inflammatory processes secondary to injury, tuberculosis, or new growth. Patients presenting herpetic eruptions should always, therefore, receive a careful examination.

Pain.

" . . . and thus would be produced those paroxysms of shooting or flashing pains, which, in accordance with a well known physiological law, are referred to the periphery, although in reality due to a central cause."—Charcot: *Lectures on Diseases of the Nervous System*, Sigerson, 1877, 60.

In mild cases the early neuralgic pain is confined to one side of the head, but in severe and fulminating cases there is intense headache and vomiting. The meningeal branch of the ophthalmic division, which is given off before the nerve reaches the sphenoidal fissure, sends filaments to supply the tentorium; in the rare cases which simulate meningitis in their onset it is possible that the ganglion cells connected with this meningeal branch are implicated. Similarly, according to Chauffard, extension of the disease from the posterior root ganglia to the meninges in spinal zoster would account for the pains down the spine, girdle sensation, exaggerated knee-jerks, and lymphocytosis of the cerebro-spinal fluid which are observed from time to time.

A more typical manifestation is formication; our out-patients complain that the skin feels as though there were something " wick " (that is, alive) under it. Sometimes by rubbing the scalp they produce bald patches, comparable to the frayed sleeve and threadbare coat which proclaim the sufferer from shingles.



A typical case of herpes zoster ophthalmicus: Confluent ulcers on cornea.

In proportion to the age of the patient and extent of the scarring, a type of pain is complained of which has much in common with that which, during the war, frequently complicated partial lesions of the median and internal popliteal nerves—causalgia; a scalding pain is felt in the palm of the hand or sole of the foot, and is increased to a maddening degree by the lightest touch. Causalgia has been attributed to compression of the nervi nervorum. Elderly convalescents from herpes zoster often compare the lancinating pains to the effect of a drop of hot oil, and are careful to avoid cold winds, which are apt to excite a paroxysm. Anaesthesia dolorosa, the duration of which was two years in the severest of our cases, is one of the gravest complications of the disease; Gowers speaks of suicide in despair. Happily cases of such extreme severity are rare.

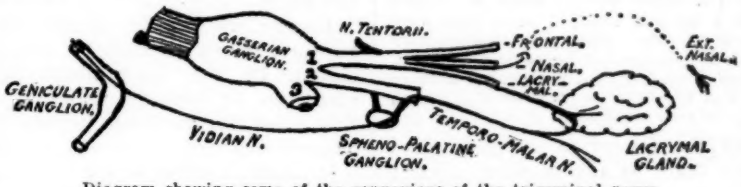


Diagram showing some of the connexions of the trigeminal nerve mentioned in the text.

Efflorescence.

" Diseased nature oftentimes breaks forth
In strange eruptions."
King Henry IV, Pt. I, Act III, Sc. 1.

The cutaneous manifestations make their appearance in the following order—hyperalgesia, erythema, vesiculation, rupture of the vesicles, cicatrization, and hypaesthesia. Occasionally, according to Poulard, the eruption is haemorrhagic or gangrenous.

The rash usually appears three or four days after the onset of the pain, but this period is not constant; for example, one of our patients suffered from hemicrania for three weeks, and another from intense headache, for the relief of which morphine was required, for only forty-eight hours before the appearance of the rash.

It is sometimes possible, in the prodromal period, to map out the area subsequently affected by the rash by eliciting a local increase in susceptibility to pain. According to Head and Campbell the eruption is due to intense irritation of ganglion cells which normally produce referred pain in response to afferent visceral impulses. In support of this theory it is urged that those dorsal ganglia are most affected which receive white rami from the sympathetic.

Fuchs records an old clinical observation that there is a striking elevation of the temperature of the skin upon the affected side, which not only is present when the inflammation is recent, but often lasts for a long time afterwards. This increase of temperature is presumably due to antidromic impulses passing from the ganglion, for physiologists have proved by experiment that stimulation of the peripheral ends of divided sensory roots causes dilatation of the cutaneous vessels.

It has been shown that mustard does not produce its ordinary effect on the skin if it has previously been anaesthetized, nor if the nerves have been divided sufficiently long beforehand to allow them to degenerate.[2] It would be interesting to ascertain whether the eruption of shingles could be aborted by injection of an anaesthetic such as quinine and urea hydrochloride, the effect of which lasts for some days.

Extensive scarring after trigeminal ganglionitis becomes more common as age advances. The following case illustrates this tendency.

Case I.

A medical student had been subject to attacks of herpes frontalis every summer since boyhood. More recently attacks had occurred twice a year, generally after examination. When he came under our observation, at the age of 20, he had for the first time reason to complain of residual scarring.

For the most part, our cases have borne out Hutchinson's rule, that when herpes zoster affects the nasal branch of the trigeminal the cornea is particularly liable to suffer. Poulard mentions the fact that the nasal mucosa is often swollen and hyperaemic during the attack, causing unilateral coryza.

A curious superstition is sometimes expressed—that when shingles meets in the middle line the result is inevitably fatal. Bilateral cases of herpes zoster ophthalmicus are extremely rare. Greenwood of Boston, who reports a case, which showed the multiple scars of the skin along the course of both supraorbital nerves, so characteristic of herpes, states that one eye was lost from glaucoma and the other from panophthalmitis secondary to infected herpes corneae. " Il n'est règle qui ne faille."

Keratitis.

" O loss of sight, of thee I most complain."
Milton: *Samson Agonistes.*

The frequency of corneal complications varies considerably in the experience of different ophthalmic surgeons. Out of 235 cases collected by Willbrand and Saenger the cornea was affected in 83. In rather more than half the cases in our series greyish streaks and opaque areas made their appearance as soon as the rash began to subside. In numerous instances there were vesicles, which ruptured on the surface, leaving superficial ulcers, which remained discrete or became confluent according to the severity of the attack. In one case the opacity was dendriform. Mild iritis accompanied the severer cases.

The current teaching is that herpes zoster corneae is only to be feared inasmuch as it tends to leave a permanent opacity. Thus, according to Mr. Foster Moore, " The ulcers

never perforate and hypopyon does not arise. . . . recurrences never occur and both sides are never involved." The following case furnishes a notable exception to this generally accepted law.

CASE II.

Male, aged 66. After severe hemicrania for three days an eruption appeared on the right side, which the patient, who had resided in Jamaica, compared to confluent small-pox. The nasal branch was affected. Severe corneal ulceration ensued, with accompanying iritis. The eye was covered with a dressing and treated with atropine and an antiseptic lotion.

At the beginning of the second week, as a result of a consultation with Mr. Teale, paracentesis and syndectomy were performed, without an anaesthetic.

Improvement was only temporary, ulceration continued, and panophthalmitis set in. After consultation with the late Sir Jonathan Hutchinson enucleation was recommended. Enucleation was accomplished without resort to any anaesthetic, no pain being felt.

There was considerable scarring, and the patient complained of fulgurating pains and of a constant sensation—"as though someone had put a plug in his eye and broken it off." Large doses of quinine afforded relief, but on one occasion, after 70 grains in three days, toxic labyrinthitis developed and prevented further exhibition of the drug. The anaesthesia dolorosa lasted for two years.

Anaesthesia of the cornea may persist for months. On rare occasions we have detected a difference between the sensibility of the nasal and temporal halves of the cornea. Clinically there seems little doubt that the neuro-paralytic factor has an important bearing on the course of herpetic ulceration of the cornea, although Turner and Ferrier, by experimental division of the fifth nerve, its root and branches, with protection of the eye from injury, reached the conclusion that keratitis from disease or injury of the trigeminus was the result of irritation rather than paralysis.

COMPLICATIONS.

"It is by no means enough to spend all our pains upon one object."—Horace: *Satires*, Book II, 4.

The following case was complicated by sympathetic irritation.

CASE III.

Male, aged 58. Right herpes zoster ophthalmicus—eruption extending to the tip of the nose. No corneal nor ophthalmoscopic changes detected on repeated examination. Extreme photophobia and lacrymation of the left eye, lasting several months.

Four years later, the patient having suffered an embolism of the right retinal artery, it was ascertained that he was still unable to distinguish between the blunt and sharp ends of a pin on the right side. The left eye was no longer irritable.

The late Sir Jonathan Hutchinson wrote of this patient as follows:

"I have repeatedly known the other eye in cases of herpes to be somewhat irritable, but I do not think I have ever seen a case which approached yours in severity. Have you tried arsenic? It is, I believe, the most efficient remedy for herpetic after-pain. I know a gentleman who suffers from frequently repeated attacks of herpes on the right eyelid, and the attacks are always attended by lacrymation and irritability of the unaffected eye."

Herpetic inflammation of the Gasserian ganglion does not prevent the secretion of tears by the lacrymal gland; the secretory fibres come from the facial trunk, via the great superficial petrosal nerve, spheno-palatine ganglion, and temporo-malar branch of the superior maxillary nerve, which communicates with the lacrymal. Oversecretion by the lacrymal gland of the opposite side furnishes an interesting problem in neurology.

Glaucoma, which complicated three of the twenty cases, occurs in two forms, the treatment of which is essentially different. The first variety is to all appearances idiopathic. There is generally some indication of predisposition to the disease—for example, glaucoma in the other eye previously. It is, in our experience, usually subacute, and tends to occur during convalescence from herpes zoster ophthalmicus, which can only be regarded as an exciting cause. The onset of glaucoma is possibly connected with loss of the normal periods of contraction of the pupil which accompany sleep. An alternative explanation is as follows:

According to Priestley Smith's theory of glaucoma the vitreous is secreted by the pars plana of the ciliary body and the aqueous by the ciliary processes. Senile degeneration affecting the two zones unequally results, it is conjectured, in a relative excess of fluid in the vitreous and displacement of the lens forward. Acceleration of some such obscure process may be responsible for the somewhat frequent conjunction of herpes zoster ophthalmicus and glaucoma. The following is an illustrative case.

CASE IV.

Woman, aged 56, convalescent from right herpes zoster ophthalmicus. Cornea unaffected. Subacute glaucoma on the same side. (The left eye had been operated on for glaucoma nine years previously.) Right iridectomy. The patient remained under observation for six years, during which time the refraction altered from 1½ dioptres of hypermetropia to 2 dioptres of myopia, with a low degree of inverse astigmatism. When last examined the vision with glasses was R. 6/10, L. 6/60.

Symptomatic hypertension, as certain American authors describe it, may generally be recognized by the presence of punctate deposits on Descemet's membrane or other signs of irido-cyclitis. Secondary glaucoma of this type yields promptly to the use of atropine. The interference with filtration must be attributed to changes in the aqueous.

Herpetic lesions of the choroid, retina,[20] and optic nerve[9] have been reported. Circumscribed nodules on the sclera of reddish colour,[10] the centre of which resembles a limpid vesicle, surrounded by injected vessels, have been observed about a fortnight after the corneal disturbances had declared themselves.[16] Facial palsy and paralysis of the extrinsic and intrinsic muscles of the eye[1] are among the rarer complications of herpes zoster ophthalmicus.

TREATMENT.

Isabel: Alas! what poor ability's in me
To do him good.
Lucio: Assay the power you have.
Measure for Measure, Act I, Sc. 5.

Like other exanthemata, herpes zoster runs its course, albeit at times a painful and protracted one. In elderly subjects, morphine is often indispensable in the early stages; but the danger attending its use in a painful affection which may last for two years is manifest. For one of our patients Gowers recommended the following prescription, which gave relief:

℞ Caffeinae citratis
Sodii iodidi
Sodii salicylatis
Salicini ... ...aa gr. v
Phenazoni ... ... gr. x

Misce. Fiat pulvis. Mitte in chartulam. Sig.: One paper to be taken every four hours as required.

There is a general prejudice against the use of arsenic, originating in Hutchinson's statement that herpes zoster may actually be caused by arsenic taken medicinally; hence the special interest of his letter quoted above.

Locally, we recommend dusting powders until the vesicles rupture, when cocaine or orthoform ointment is appreciated. In the later stages painting with ichthyol in glycerine, or massage with any simple ointment, is beneficial; hot fomentations should be avoided, as the skin is anaesthetic, and burns are readily produced. Paroleine is a suitable instillation for the conjunctival sac. The intraocular tension should be estimated at regular intervals and ocular complications treated as they arise.

Since encountering the case described above which resulted in panophthalmitis, we have several times resorted to suture of the lids. Sir John Tweedy observes that "in very severe cases immediate and permanent relief may be obtained by paring the edges of the lids and suturing them together. Not only does the pain at once abate, but the ulcerative process is checked and repair takes place." We have verified this observation. In elderly patients continuous application of a pad and bandage is apt to produce entropion, retention of secretion, and superficial dermatitis, and the cornea is at the mercy, for so many hours at a time, of any micro-organisms present in the conjunctival sac. Median tarsorrhaphy, on the other hand, provides a natural dressing with adequate drainage. We make a shallow incision along the grey line of the lids, and, introducing three sutures, bring the clefts so formed into apposition. Union is firm on the third day, and *the cornea may be inspected by gently separating the outer or inner third of the palpebral margins.* The central united portion is divided when corneal sensibility returns—after a period of eleven months in a recent case. The process of healing is

slow and relapses are apt to occur if the lids are separated too soon. Ultimate transparency of the cornea depends largely on complete protection of the delicate corneal surface and freedom from infection.

Median tarsorrhaphy lightly closes the eye as in sleep, compelling it to "hibernate" until its reflex protective mechanism is restored.

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THE TREATMENT OF CHRONIC MALARIA.

BY

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QUININE has been long, and still is, recognized as the chief drug for use in malaria, but there is no general agreement as to the best method of administration, and this is my excuse for discussing some results of my experience in its use.

1. *Physical Form of Administration.*

Sugar-coated pills of quinine are very unsatisfactory, and I have known them, when containing quinine hydrochloride only, cause violent gastric trouble in malaria, and pills so coated are often passed through the bowel undissolved. Even uncoated pills may be so densely compressed, if made of the sparingly soluble sulphate, that a like result may follow; but, on the other hand, if made of the hydrochloride they may dissolve in the act of swallowing so as to give an intensely bitter taste. If taken in 10 to 15 grain doses, whether in this form or as wafers, or in easily soluble capsules, gastric irritation is sometimes set up; this is especially liable to be the case if only a mouthful of water be taken. This result is due to the quinine acting in great concentration on a limited area of the stomach. These troubles can be avoided by administering the quinine in uncoated pill form, using an excipient affording enough cohesion both to prevent it dissolving during the act of swallowing, and to slow down solution in the stomach sufficiently to avoid undue concentration when at least 2 ounces of water are taken with it.

2. *Chemical Composition of the Dose.*

Unfortunately, for reasons of cheapness, the sulphate has often been the chief salt used, though it has otherwise manifest disadvantages as compared with the hydrochloride, which is soluble 1 in 36 or so of water, is neutral, and in solution less liable to get mouldy. To give quinine sulphate, which is soluble 1 in 800 or so of water, in a mixture to which nearly a minim of dilute sulphuric acid or aromatic sulphuric acid is needed for each grain to secure its solution, is unsatisfactory, especially where large doses, such as 15 grains, are given. The taste is very disagreeable, the acidity is prejudicial to the teeth, and on reaching the stomach both its chemical action and the foreign nature of the mineral acid cause further local and afterwards even systemic trouble. Clinically quinine hydrochloride is better tolerated. Whereas in the case of children pills cannot be used, the sparingly soluble and so less bitter sulphate can be given with syrupy or mucilaginous but non-acid menstrua; the tannate might be better still

3. *Route of Administration.*

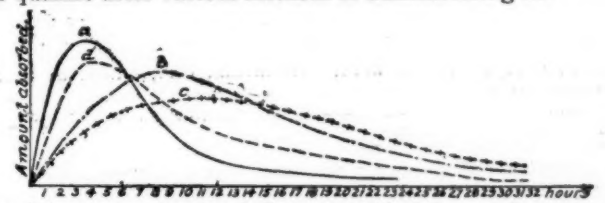
The oral route has in general most advantages, and even where gastric disturbance might be feared adoption of the rules suggested in this paper overcomes it. In severe acute forms the intravenous route would, of course, be the correct one.

Kenneth Mackay[1] found that blood films become negative earlier under oral administration than under either intramuscular or subcutaneous administration, and that four-hourly observations upon the asexual benign tertian cycle appear to show that quinine has an immediate effect upon the malarial parasite—not only upon the young sporulating merozoite but also the intracorpuscular stage.

4. *Time of Administration.*

Marchiafava and Bignami have shown that quinine acts in all phases of the life of the malarial parasite and that therefore it is unnecessary to wait for any specified period. Giemsen and Schaumann found that if quinine were given with the meals traces of it were not found for over two hours, but, given fasting, in twenty to thirty minutes. Kerner demonstrated that, given by the mouth, the hydrochloride is found in traces in fifteen minutes, after the quinine in alkaloidal form in twenty-five to thirty minutes, and that its excretion continued with a meal; whilst Mariani showed that the maximum elimination of quinine in a man's urine occurred between the sixth and twelfth hours if given after food, but between the third and sixth hours if given before it. Castellani and Chambers[2] say: "With regard to mild quartan and tertian fever, in many cases we give the drug three times a day without regard to the conditions of parasitic life, and this method is apparently not less successful" (than giving the drug four hours before sporulation of the parasite is due).

The following scheme, adapted from MacGilchrist,[3] will give some idea of the rapidity of absorption and excretion of quinine after various methods of administering it.



a, Subcutaneous, 1 in 150. *b*, By mouth (with food). *c*, Subcutaneous, 1 in 8 or 1 in 2. *d*, By mouth (fasting).

This takes no account of the effects of gastro-intestinal disorders, whether due to malaria or quinine itself or to other causes, in diminishing or in increasing the energy or rapidity of action of a dose, but, so far as my experience goes, by adopting the methods to be subsequently described these are to a great extent negligible.

Hele's experiments[4] proved that "In active malaria the excretion rate after oral quinine no doubt varies, according to the condition of the alimentary tract, but high fever is not incompatible with rapid absorption and the rapid attainment of the maximum excretion rate, more rapid than after intramuscular therapy." He found no decrease in quinine excretion during continuous administration by the mouth, but that the greater part of the excreted quinine is excreted within twenty-four hours of the last dose, though traces persist for another twenty-four or forty-eight hours. There was no great fall in the quinine excretion till the twelfth hour after a dose by the mouth, till the eighteenth hour after intramuscular injection, and, following the immediate rise, fall, and re-rise in the first half-hour, till the twelfth hour after intravenous injection.

MacGilchrist suggests that a rapid and energetic absorption of quinine is best obtained by giving a salt of it during fasting, then when sporulation is regular to give it two or three hours before the paroxysm, fasting; but where sporulation is irregular to give less soluble forms soon after meals. It is generally agreed that even if a certain amount is absorbed from the stomach, as some assume, the greatest amount is absorbed in the duodenum and practically none (when the drug is given orally) in the large intestine. In practice I prescribe it to be taken an hour before meals and

5. *Frequency of Dose.*

If 3 or 4 grains be adopted as a dose, and 16 grains as needful daily, it means that four or five doses a day must be given. For a full-sized adult this implies an amount just bordering on one sufficient to cause nervous symptoms, varying with the patient—symptoms which I always try to avoid. This will effect a fairly continuous, yet mild, quininization of the patient's system, with the idea of steadily lowering the vitality of the plasmodia till they become unable to reproduce their kind—just the opposite of the therapia sterilisans magna, or knock-out blow. It is this great evenness and persistence of treatment that I venture to think affords this, and one which might be labelled "therapia sterilisans perstans." The doses should be given as far as possible at equal intervals, and therefore one should be given during the night, if possible, or at least the last thing at night, and another the first thing in the morning.

6. *Coincident Treatment.*

This consists in most cases of preliminary treatment with an aperient, mostly calomel. In view of the action of the latter in causing "bilious" motions, whether due to lessening catarrh in the region of the duodenum, etc., by acting as an antiseptic, or otherwise, the possibility of its aiding indirectly the absorption of quinine is evident in view of MacGilchrist's experiments. He found that the alkaloid quinine in the crystalline form is soluble 1 in 625 of blood serum (that is, three times as soluble as in water), but is soluble 1 in 183 of bile (that is, about nine times as soluble as in water). Against this it is often assumed that the alkaline secretions of the liver, pancreas, and intestines precipitate the quinine, though, as MacGilchrist showed, quinine glycocholate is soluble in excess of bile. There may be in addition to the antiseptic and characteristic aperient action of calomel another due to its increasing the mucous secretions in the bile ducts of the liver (as occurs with the salivary and intestinal secretions), and so removing the blocking by the malaria-thickened bile. In some cases of persistent headaches in patients affected with malaria calomel acts very quickly and thus I have not needed the help of acetyl-salicylic acid, gelsemium, etc., which at best act symptomatically.

I may now refer to some prescriptions in which small doses of quinine are alleged to be effective.

1. *Warburg's Tincture* is a very complicated mixture containing some fifteen ingredients. It contains in each half-ounce 4 grains of quinine sulphate, and as only two doses were to be given, in all only 8 grains were administered. But with each dose there are given 6 grains of aloes—that is, within half an hour, 12 in all—a rather severe treatment. In view of the readiness with which a chill seems to bring on an attack of malarial fever the diaphoretics contained in the tincture are of possible value; they may be expected also to act beneficially as gastro-intestinal antiseptics. The alcohol is evidently a powerful solvent medium, and beyond that its action need not specially concern us. This preparation has been abandoned since the aperient action, at least in some cases, must be rather strong; hence the aloes, if desired, is omitted in the various preparations supplied commercially, thus, perhaps, removing the soul of the efficiency ascribed to it. The complicated form makes it expensive, many of the ingredients are practically unobtainable, and their effects are unknown; it is said to depress the heart and has an appalling taste.

2. *Huxham's Tincture* was the forerunner of the compound tincture of cinchona, the composition of which has varied since its first introduction. The dose was 1 to 4 fluid drachms. Originally it was made with pale, but is now made with red, cinchona bark; the other constituents being orange peel and serpentary and saffron (now omitted). The serpentary in small doses acts as an aromatic bitter, diaphoretic and diuretic; in larger doses as an emetic and aperient. The full dose of half a fluid ounce, containing 10 per cent. cinchona bark, would perhaps mean 1½ grains of mixed cinchona alkaloid. At four doses a day this amounts to 6 grains of cinchona alkaloids with some possible help from antiseptics and diaphoretic or mildly aperient agents. The present official dose of the compound tincture of cinchona is only half to one fluid drachm.

3. E. T. Simpson (Civil Surgeon of Oudh, India) recommends in all acute cases where diarrhoea is not present:

Magnesiae sulphas	dr. ij
Liq. ammoniae acetatis	fl. oz. j
Quininae sulphas	gr. xv
Aquam camphorae	...ad fl. oz. viij

Sig.: One ounce every four hours.

He claims that 90 per cent. of cases recover under this treatment. He employs a somewhat similar prescription for chronic tertian.

4. Finally, there is Forbes Leslie's recommendation of calomel only.

Method Recommended.

The foregoing will make clear the principle—namely, the more or less continuous coincident administration of an aperient, preferably calomel—upon which I base the method which I have for many years adopted and which is as follows:

1. Give a small dose of calomel at once, 1 grain, perhaps repeated in an hour or so; this single dose is to be administered each night at bedtime. I prefer the pill form as less liable than that of a powder to cause mercurialism in the mouth. This should be followed early next morning by a saline aperient. This will help release of bile into the duodenum and by its antiseptic and aperient action without irritation cleanse the bowels. The continual administration of calomel, in doses insufficient to risk distinct mercurialization, is to my mind extremely, indeed I think essentially, important; though in certain circumstances a stronger dosage for the purpose of thinning the thickened bile might be desirable. The rapidity, however, with which the calomel aids quinine indicates a local gastro-intestinal action rather than one due to absorption.
2. Give the quinine in 3 or 4 grain doses according to the size and strength of the (adult) patient, as a pill; the small dose and form avoid irritation of the stomach.
3. Give the hydrochloride; this is in order to secure rapid absorption with minimum of gastric irritation.
4. Give the doses an hour or more before meals, and at bedtime; this is in order to secure rapid absorption.
5. Give with each dose 3 or 4 ounces of water; the amount of fluid, by diluting the quinine freely, prevents disturbance of the stomach and encourages rapid removal from it.
6. Continue the treatment for two months.

I have never failed in this way rapidly to relieve urgent symptoms; generally there is no attack or at most only a slight one in the first week of treatment, none afterwards in my experience. Those few cases which I have followed a year or two after the treatment have been free from attacks and have felt unusually well as compared with their general condition between the attacks before treatment. But, no more with this, perhaps, than with other treatments can one promise an absolute cure. I claim, then—

1. That the method is in no sense unpleasant, except as regards taking the salines, though even these might be replaced by other aperients.
2. That it is easily carried out, being very simple. The patient can go on with his work, not needing to go into hospital.
3. That the drugs are easily obtained, are portable, and keep well.
4. That if the result is not perfect it at least is produced more rapidly than by the ordinary routine, and in general is much more effective.
5. That there is no risk whatever of permanent disorders of the nerves due to quinine, for, indeed, the slightest symptoms of such disorders are taken as the indication for lessening the dose.

Although my experience is limited to chronic cases it is quite possible that the principles of this treatment are adaptable at least in some measure to acute cases.

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THE AUTOGENOUS PEG GRAFT IN CERTAIN FRACTURES OF THE FEMUR.

BY
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FROM a study of the end-results of simple fractures of the shaft of the femur it would appear that in spite of a great variety of methods of treatment there is still scope for one which will ensure a more perfect end-result.

The disabilities resulting from fracture of the shaft are from two main causes—bad alignment and knee-joint trouble.

Faulty Alignment.

The shortening is maintained by the pull of the muscles irritated by the bony ends and by the distension of the fascial planes with haemorrhage and exudate. This is usually considerable at first, and attempts at manual reduction frequently fail. Oblique fractures make the retention of the position very difficult. The usual procedure is to

attempt manipulation if there is marked shortening, and if retention is difficult extension is applied to the femur by one of the various methods.

The extraordinarily careful adjustment of the line of pull and the delicate nature of the means of retention of the fragments mean constant watching and attention; in civil hospitals the surgeon has not the constant stream of such cases that were seen in military hospitals, and minor defects result. Manipulation followed by traction with a considerable weight frequently fails to overcome the muscles, so that shortening and overriding persists, and when reduction is successful and retention is attempted by extension the presence of the necessary apparatus makes it difficult to carry on the movements of the joints and the massage which are so useful to the injured limb.

Limitation of Knee Movements.

The commonest cause of the limitation of movement of the knee is the long-continued immobilization, as was so evident in many of our soldiers returned from German prisoner-of-war hospitals, where they had not been looked after. It is said that immobilization will not limit the movements of a healthy joint. This may be so, but it allows tendons and muscles to undergo fibrosis and shortening, and the end-result is the same—a limitation in the extent of joint movement. This fibrosis is due in many cases to the actual wounding of the quadriceps by the bony fragments. When healing takes place fibrous tissue forms; this limits the relaxation of the muscle and also tacks it down to the fracture. Actual adhesions in the joint are rarely considerable enough to prevent their being gradually broken down, nor is any capsular shortening ever very troublesome.

We should aim at some method by which complete reduction of the deformity is obtained and retained with some degree of certainty and yet without any cumbersome appliance that will prevent active movements and massage to the affected parts. An autogenous intramedullary peg bone graft as here described fulfils these conditions. This graft of live bone ensures alignment in a good position and maintains fixation while the osteogenetic functions produce a greater amount of internal callus, and the patient is allowed a greater freedom of movement at an earlier date. The peg stimulates bone production, and this new bone fills up between the peg and the parent bone till a solid mass is produced. This increases in strength according to the demand put upon it, and it is of great importance to get movements started early so that the new tissue may be "taught" its function. It is not contended that the peg is a permanence, as with complete bony union the shaft generally resumes its normal shape and a complete medullary cavity is reproduced. This is even produced when a long gap of 4 to 5 inches in the forearm bones is filled with the anterior surface of the tibia. It takes some years to produce, but it is the eventual result.

The essential feature of every case is that there is no wound of the skin that might lead to sepsis in the operative field, hence it is practically only in a simple fracture that the method can be used.

In many oblique fractures where both reduction and retention are difficult and where external immobilization is necessary afterwards to retain the position an autogenous peg graft would make the after-treatment easier and the end-result better. It would also be the operation of choice in that class of fracture in which reduction cannot be secured otherwise than by open operation. The obstacle to reduction would appear to be either the pull of strong muscles irritated by the fragments or oedema expanding and so shortening the fascia.

Mode of Using a Peg Graft.

If operative treatment is deemed essential it is necessary to wait only until any shock has disappeared. It is better to give the operative field a very complete preparation; this is usually begun two days before the operation, and after the usual shaving, washing with spirit, soap, and lysol, spirit is applied and then 1/2 per cent. picric acid; this is found to be less irritating to the skin than iodine and equally effective. The skin of the same leg over the crest of the tibia is prepared equally carefully.

The fracture is exposed by an incision 5 to 7 inches long over its lateral aspect. It is a matter of choice whether sterile towels should be clipped round the wound, but where there is any doubt about the skin the towels should certainly be used. The blood clot, including that in the marrow cavity, is cleared away as freely as possible. Traction is applied to the limb by a second assistant, and the deformity is reduced by the levering aid of a strong file and Lane's T-shaped lever with serrated edges. It is essential to obtain this preliminary reduction so as to stretch the muscles and make the reduction easier when putting in the graft. The leg is now adducted at the site of fracture and the ends protruded from the wound so that the medullary cavity may be prepared. The size of this is increased in its transverse axis by the reamer attached to the Albee saw. The actual calibre is not increased in all directions as the peg graft to be introduced is flattened rather than round. This reaming is done to a greater length in one of the fragments, that length being the same as the graft to be cut. The length in the other fragment need only be half the length of the graft.

The peg graft is cut from the anterior surface of the tibia and should be about 4 to 5 inches long, unless the fracture is oblique, when a greater length is necessary. The breadth should be just less than the already measured breadth of the marrow cavity it has to fit. The periosteum is now stripped from the graft, as this fibrous tissue element prevents union of its underlying bone. A shallow saw cut is made at the mid-point of the graft so that its correct position may be ascertained when fitted.

The graft is now inserted into the upper fragment to practically its full extent; it should not be gripped too tightly by the femur, but should be so loose as to be easily extracted by a pair of Kocher's artery forceps which are clipped on to the terminal 1/8 inch of the graft, which is allowed to protrude. The lower fragment is now got into position by traction on the foot and by leverage, but the thickness of a strong file—about 3/8 inch—is interposed between the bony ends, so that a gap of that amount is left between the bone fragments through which the Kocher's artery forceps are used to "tease" down the graft into position. This is recognized to be correct when the saw cut in the middle of the graft is seen, and then the file is carefully removed while traction is applied. The traction being removed, accurate reduction is obtained and retained by the peg graft. The muscles and fascia are stitched with interrupted catgut and the skin with interrupted silkworm gut. No drainage is necessary, but the stitches are not put in too closely so that the effused blood can get away easily.

Although I used a complete plaster case in some of my earlier cases I do not now consider this necessary, as with ordinary care of a good nursing staff there is little to fear. The leg is accordingly bandaged firmly on a double inclined plane and the plane fixed to the foot of the bed. About the end of the second week the bandage is removed from the leg and the knee extended and some gentle massage given. This is continued once daily right on and the movements gradually increased. By the end of six weeks the splint may be removed and active movements increased by this freedom. Consolidation of the callus is frequently quickened by ionization with calcium salts, while the faradic current to the quadriceps is extremely useful in developing a muscle slightly wasted by disuse. The patient should be taught frequently to contract his quadriceps even though not getting great movement with this contraction, to preclude any possibility of it adhering to callus. He is up on crutches at the end of two months and can get home. In three months a walking calliper is applied and used for other three months, by which time the patient should be saying good-bye to the surgeon. The method is so simple and reasonable that it seems necessary to add the history of only one typical case:

K. B., aged 23, as a result of a motor cycling accident, was admitted to my care on May 23rd, 1921, with a simple fracture of the lower third of the right femur presenting the usual signs, but

no crepitus could be made out. There was over 3 inches of shortening. *X*-ray examination showed a transverse fracture at the junction of the lower and middle thirds with about 3 inches overriding of fragments. The leg was put on a double inclined plane, and on May 24th, under a general anaesthetic, was pulled out as far as possible, counter-extension being maintained by a roller towel round the perineum. Pearson's ice-tong calliper was applied and the patient put back to bed; *x*-ray examination showed that there was still 2 inches of shortening.

On June 5th a further attempt was made under chloroform to correct the displacement of the lower fragments and the leg was put on an inclined plane. This attempt was also unsuccessful, as shown by *x* rays; 45 lb. weight extension was now put on the Pearson calliper with a roller towel round the perineum to the head of the bed. *X* rays still showed the fracture to be in an unsatisfactory position, and the shortening not reduced after forty-eight hours of this weight. It was accordingly decided to operate on the fracture.

Operation.

On June 11th an incision was made along the lateral aspect of the leg, exposing the site of fracture. There was a considerable amount of blood clot and bruising of muscle at this level. By means of traction on the leg and leverage with a heavy file between the ends it was seen to be possible to get the fragments in good position. Retention, however, appeared difficult, and I decided to introduce an intramedullary peg bone graft. An incision was made over the tibia on the same side, and a piece of the anterior surface of the tibia about 6 inches long by 3/4 inch broad was removed by Albee's electric saw. The graft was slightly sharpened at both ends and the electric reamer used for slightly widening the medulla of both femoral fragments. The graft was then inserted into the two fragments and their position was found to be easily retained by this means. The wounds were then closed with catgut and silkworm gut without drainage; the leg was applied to a Miles's double inclined plane.

Recovery from the operation was uninterrupted and the stitches were taken out on the thirteenth day; knee movements were started at the end of the first week. The inclined plane was left off on the twenty-first day, he was up on the twenty-eighth day, and out on the fifty-second day. No shortening resulted.

The radiogram of the femur taken about two months after the operation showed perfect alignment with complete osseous union and a considerable amount of callus around the fracture. The knee- and ankle-joint movements rapidly improved, the full extension of the knee being the last movement to come, but all were perfect on his discharge, and he now walks without a limp and is able to run and play strenuous games without any difficulty.

Conclusions.

1. The method by autoplastic peg graft is superior to all other operative measures in that it retains the alignment of the fracture and helps to form new bone, so ensuring union at an earlier date and allowing early active and passive movement.

2. Though requiring a certain skill with the electric saw it is by no means a difficult operation.

3. The peg is eventually absorbed from the marrow cavity, leaving the shaft in the normal condition.

4. It obviates any limitation of knee movements as the joint is moved from the tenth to the twelfth day.

5. The results achieved warrant its much wider application.

LARYNGEAL INTUBATION IN ANAESTHETICS.

BY

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THE method of laryngeal intubation to be described is offered (1) as an alternative, and (2) in some cases as a very necessary adjunct, to intratracheal insufflation where this method of anaesthesia is indicated.

Intubation for the administration of the anaesthetic, when the operation is in the region of the mouth or jaw, is usually performed by means of a Kühn's tube. The indirect method of intubation, however, is not generally so easy nor so certain as that of passing a tube through the glottis by direct vision; moreover, the tube supplied by instrument makers in this country seems to offer a very considerable resistance to free respiration.

The technique of intubation to be described is no more difficult and takes no longer than that for passing a tracheal catheter. The following advantages may be claimed for it:

(*a*) It completely shuts off the air passages so that no blood or mucus can enter.

(*b*) It enables gas and oxygen almost entirely to be administered, and, as most operations in this region do not require very great relaxation, the patient can be kept in a lighter zone of anaesthesia without fear of respiratory obstruction, the glottic sphincter being entirely out of action.

(*c*) A soft rubber tube is used which does not injure the cords.

In combination with a tracheal catheter—

(*d*) To obtain expiration entirely free from all obstruction some form of return airway is usually necessary with intratracheal insufflation. This especially applies to cases where the surgeon is working on the lower jaw.

(*e*) It prevents bubbling of blood from hindering the surgeon when the operation is in the mouth or nose. In the latter case a post-nasal sponge is unnecessary.

The tube used is of rubber, rather a cheap quality being

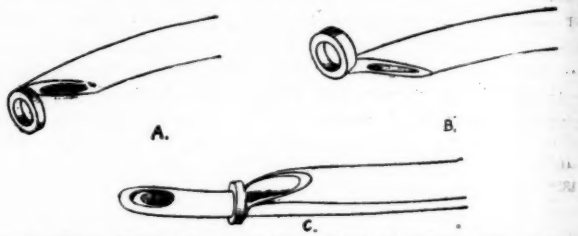

FIG. 1.—Three illustrations showing method of cutting tube to slide along catheter.

preferable because it is not so soft and compressible. The walls are not more than 2 mm. thick. The size varies with the patient and also with its mode of use, a larger size, of course, being necessary if the patient is to breathe backwards and forwards through it, than if it is merely to be used as a return airway, the entering stream of air being supplied by way of a tracheal catheter. Tubes approximating numbers 22 to 32 French catheter sizes are most generally useful, and the length should be about 8 inches, so as to carry the end well into the trachea. When the tube is to be passed through the nose, its end is cut away in a sloping manner to facilitate its passage through the nose, and a small hole is punched half an inch from the end

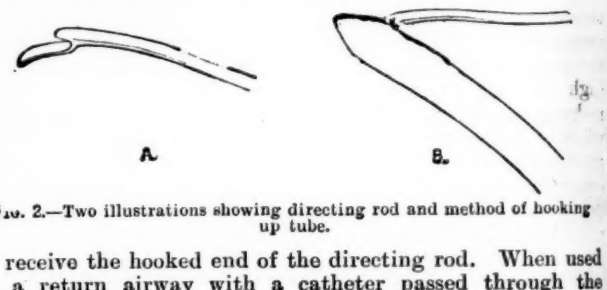

FIG. 2.—Two illustrations showing directing rod and method of hooking up tube.

to receive the hooked end of the directing rod. When used as a return airway with a catheter passed through the mouth, a tube is cut as in Fig. 1, and the end turned round to form a loop; this slides down the catheter after it has been passed into the trachea, and so is guided through the cords.

The directing rod is a straight metal rod curved slightly upwards and forked at the distal end. The inner prong of the fork is turned upwards and a little outwards so as easily to enter the hole in the tube when catching it up in the pharynx. The outer prong is cut short (Fig. 2).

The direct laryngoscope is used for intubation. When intubating by way of the mouth, the directing rod is hooked into the hole in the distal end of the tube, which is cut as for passage through the nose. The two are held together and passed by the side of the speculum. The upward bend on the directing rod enables the tube to be more easily directed between the cords. As soon as the thin end of the tube has passed into the glottis it is pushed on alone, and the directing rod gently withdrawn.

After intubation, the tube is connected with a gas-bag by means of a metal angle piece, a short length of one-inch-bore rubber tubing, and the usual three-way stopcock, the mask having been removed. A flat angle piece curving straight down to the chin has proved very useful for intranasal operations; it does not get in the operator's way if it is held to the chin by a piece of adhesive plaster (Fig. 3).

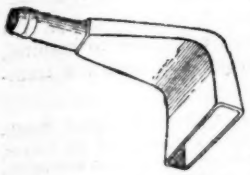

FIG. 3.—Flat metal angle piece.

When administering gas and oxygen by this method it is advisable to keep up a small *plus* pressure (3 to 5 mm. Hg) in the bag. This is easily effected by suitable adjustment of the stopcock. Ether or chloroform can, of course, be administered by using a Shipway's three-bottle apparatus in connexion with the intubation tube. Before removing the tube it is advisable thoroughly to cleanse the pharynx and mouth of all mucus and blood.

When the operation is within the mouth a double intubation may be performed as follows: A catheter is passed down one side of the nose and the return airway tube down the other (a piece of tubing with a natural curve should be chosen and passed with its concavity towards the floor of the nose). The laryngoscope is now passed through the mouth and the tube and catheter viewed in the pharynx. After having passed the catheter into the trachea (BRITISH MEDICAL JOURNAL, October 16th, 1920) the hooked end of the directing rod, turned so that it curves towards the tube, is passed down into the eye at the end. By rotating the rod through a quarter-circle so that it now turns upwards, a secure hold of the tube is obtained, and it is easily directed between the cords.

The advantages of this method over the simple pharyngeal return airway previously described are that bubbling of blood is entirely avoided without packing the pharynx, and that if the lower jaw is pushed back, as often happens during intra-oral operations, the airway is not in the least obstructed.

CHANCRE REDUX.

BY

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CHANCRE redux is a condition which excited a good deal of interest among syphilologists of a past generation, but little appears to have been heard of it in recent years, though Wilfrid Fox[1] has drawn attention to the fact that it may be mistaken for the primary lesion; it has therefore been thought worth while to record the following cases from the venereal diseases clinic of the Royal Gwent Hospital, Newport, as further illustration of a condition which appears to be of importance both in diagnosis and prognosis.

CASE I.

A man, aged 25, first attended the clinic on August 15th, 1921. There was no history of previous infection. Exposure ten weeks previously; sore first noticed ten days ago. He had a slightly indurated sore on the ventral surface of the glans penis and the inguinal glands were enlarged; there were no other signs. General condition good. The *Spirochaeta pallida* was found in the sore by dark-ground method. The Wassermann reaction was weakly positive. Treatment was commenced forthwith (on dark-ground diagnosis) and an intravenous injection of novarsenobillon and an intramuscular injection of mercury given. In the ensuing eight weeks he received a total of 4.8 grams of the former and 8 grains of the latter. The sore was healed in a fortnight, and a Wassermann test done on October 28th was completely negative. He then took potassium iodide, 10 grains by mouth thrice daily, for six weeks.

On January 6th, 1922, he attended and stated that a sore had broken out a week previously. He emphatically denied re-exposure and said that eight days previously he had had an attack of vomiting, after which he had become somewhat jaundiced. He now had a small non-indurated sore on the inner surface of the prepuce—that is, not at the same place as the original chancre. This sore, on dark-ground examination, showed numerous *Spirochaeta pallida*, and the blood gave a strongly positive Wassermann reaction. As the urine contained some bile, salvarsan was withheld and he was given intramuscular injections of mercury only, 1 grain at weekly intervals. The sore was quite healed by February 1st, and no other lesions developed; the jaundice quickly disappeared, but the Wassermann reaction was still strongly positive on February 15th. On March 1st arsenobenzol treatment was resumed, and he had eight further injections of 0.45 gram at weekly intervals. He stayed away from the clinic through the month of June, and on his return on July 19th his blood was slightly positive only. He took liq. hydrarg. perchlor. dr. 1 with potass. iodid. gr. 10 in mixture by the mouth for two months, but in spite of this his blood relapsed, and on September 29th was back to markedly positive. He had two more injections of novarsenobenzol and mercury, but then stayed away from the clinic and has not attended since.

This case, I think, must be considered a relapse and not a reinfection, though, in view of the fact that he had what might be termed more than a maximum tolerant dose of novarsenobenzol, such a clinical as well as serological relapse is unusual. With a sore not more than eight to ten days old (he was attending the clinic at the time it developed), the Wassermann reaction was strongly positive, and in spite of treatment his blood has not remained permanently negative since.

CASE II.

A man, aged 21, first attended on April 13th, 1921, with a history of exposure three weeks previously and soreness of his penis for one week. He had phimosis with a profuse discharge. No *Spirochaeta pallida* but numerous *refringens* found; no gonococci; no ulcer could be felt beneath the prepuce—probably because it was too early. The Wassermann reaction was slightly positive. He was given 0.45 gram of novarsenobillon and 1 grain of mercury. Blood taken the week following was strongly positive. Seven more injections were given at weekly intervals to July 21st; he then stayed away until August 10th. He was then free from active signs, the prepuce could be easily retracted and the sore was quite gone, no scar being visible. The Wassermann reaction was completely negative. He was given potassium iodide 10 grains t.d.s. On August 24th he reported a slight soreness at the margin of the meatus; this was thought to be a simple balanitis and he was ordered to resume local treatment (hydrogen peroxide), but a week later there was a definitely ulcerated area and *Spirochaeta pallida* was found in the serum obtained from it. He did not attend the clinic again for a week, and the blood taken then was found to be strongly positive. He was given a second course of novarsenobillon and mercury injections. Within a fortnight the sore was quite healed and no further signs developed. Injections of the two drugs were given at weekly intervals up to October 23rd, and on the 30th of that month his blood was completely negative. He took potassium iodide for six weeks and then stayed away. He came again to the clinic on February 15th, 1922, and was found to be free from active signs and the Wassermann reaction was completely negative. A month later the blood, taken a week after a provocative dose of novarsenobillon, was still negative. He had no further treatment, and a like result was obtained in the following June and November.

This patient, like the first, emphatically denied re-exposure, and the strongly positive Wassermann reaction so early in the stage of the second sore makes it probable that his statement is correct, though it is not quite so conclusive as in the first patient, where the sore was a little older, though certainly not more than three weeks, and probably only two, when the blood test was done. It is unfortunate that blood was not taken on August 31st, the day spirochaetes were found in the sore, and when one considers the way the disease cleared up, both clinically and serologically, one is not quite so certain that this was not a reinfection.

But should either of these cases be called chancre redux? Hutchinson's[2] original description laid stress on the fact that the sore is almost invariably located exactly on the site of the former chancre. The first of these does not fulfil that criterion; the second possibly does if we do not regard it as a reinfection.

The point on which I would lay stress is that these cases may, if a full bacteriological as well as clinical examination be not done, be taken for reinfections, and that, unlike the latter, their prognosis from the point of view of a permanent cure is much more unfavourable—as witness the first case, who is still uncured, in spite of eighteen months' treatment on most modern lines.

More recently a patient came to the clinic showing what I would consider a classical redux chancre.

CASE III.

A man, aged 32, attended on January 10th, 1923. He gave a history of a chancre six years ago, and some months' treatment for it by mercury only. Beyond some sores on his head he does not appear to have noticed much in the way of secondary signs, and he had been quite free from symptoms for over four years, until his present trouble began. He had a gummatous ulcer on his palate, and, on what he says he is sure is the site of his primary sore, was a definite red indurated area which, though now dry, he said had been weeping recently. The Wassermann reaction was strongly positive; the site of the chancre was too dry to get any

material for examination by dark ground. He was put on novarsenobenzol and mercury injections; the induration and ulcer quickly became much less and disappeared in the course of about three weeks.

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MEDIASTINAL GROWTH WITH VENOUS THROMBOSIS.

BY

J. A. MACLAREN, M.D., CH.B.

THE following case is of interest owing to the difficulty in arriving at a definite diagnosis.

In August, 1922, a medical man began to suffer from general malaise, shortness of breath, and cyanosis of ears and nose; *x*-ray examination was negative.

In October, when I was called in, there was complete thrombosis of the brachial veins and partial of the external jugulars; the face was puffy and congested, and the arms enormously swollen. The superficial veins of the thorax and abdomen were engorged. The respirations were quickened and shallow; the heart apex was outside the nipple line, and the liver two inches below the costal margin. The pulse was regular, varying between 70 and 80 a minute; there was no heart murmur, and the chest was clear except for slight dullness and diminished air entry at the right base behind. A sputum test was negative for tubercle bacilli; there was no history of syphilis, but there was a history of previous thrombosis of the right leg following enteric fever and malaria some thirty years ago. Treatment consisted in iodides and podophyllum internally, with fomentations to arms and support to arms and head. The oedema and hardness of veins gradually cleared up, and the heart and liver became normal in size. The chest dullness, however, did not disappear, and later the left base behind also became dull; there were no adventitious sounds except for a few occasional coarse crepitations. The extreme bases appeared to be clear and resonant and breath sounds were audible near the spinal column. The dull patches varied in position and extent from day to day, and were influenced by dry cupping. The patient's temperature never rose above normal, and he had no discomfort apart from slight shortness of breath, sleeplessness, and some flatulence.

In February, 1923, oedema began to reappear in the arms, and later in the right leg, and the heart sounds became muffled. There was then no appreciable dullness in the front of the chest. On the chance of there being a septic focus present I now inoculated him with antisepsis vaccine (P. D. and Co.), with the result that the oedema rapidly began to disappear and the chest dullness diminished. After the third weekly dose everything cleared up except a small patch of dullness in the right axillary line of the chest. Improvement in his condition continued till the beginning of April, when suddenly cough became troublesome, cyanosis began to return, and the heart sounds became weak. At this time there was some slight dullness to percussion over the middle of the front of the chest. The patient now lost weight and daily became weaker and more cyanosed, though he stated that he felt really better in himself except for the cough. Cyanosis increased, oedema of both legs set in, he suffered from orthopnoea, and died suddenly after getting into bed on April 19th.

Post-mortem examination revealed a soft growth, cheesy and breaking down in parts, adherent to the manubrium sterni. It extended down to the pericardium and surrounded the large vessels at the base of the heart. The apices of the lungs, especially on the right side, were involved, and on cutting into the lung substance secondary deposits could be seen studded throughout both lungs. Microscopically the growth showed all the characteristics of round-celled sarcoma.

The points I wish to emphasize are: (1) *X*-ray examination showed no evidence of new growth. (2) Until the last week or two of the illness there was no dullness over the anterior mediastinum. (3) The dull patches behind varied daily in size and position, and were influenced by dry cupping. (4) The antisepsis vaccine produced immense temporary relief, causing the dull patches, the cyanosis, and oedema to disappear. (5) What relation, if any, had the new growth to the thrombosis? Finally, I draw attention to this point: "In all cases of venous thrombosis affecting the upper portion of the body the existence of a mediastinal new growth should be borne in mind in spite of the want of direct evidence."

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

ACUTE PUERPERAL INVERSION OF THE UTERUS.

THE case here recorded is of interest on account of the serious condition of the patient when admitted to hospital, and the rapidity with which recovery followed the treatment adopted.

Mrs. M. W., aged 29, was admitted to Victoria Hospital, Southend, on April 16th, suffering from complete inversion of the uterus, following labour, which had occurred an hour previous to admission.

She had been under the care of a midwife, who stated that labour had been normal but somewhat precipitate. As the placenta did not come away after half an hour she expressed it, and the "placenta and uterus came down together." The placenta was then removed. She also said that she had not pulled upon the cord, which was normal in length and was not twisted round the child. The haemorrhage was slight. Two years previously the patient had a normal labour, in which the placenta had been retained for an hour after the birth of the child.

On admission the patient was unconscious and pulseless, and in a condition of extreme shock. The shock was treated and consciousness returned in an hour, when the pulse could first be felt. The patient was lightly anaesthetized and Dr. Cleveland Smith succeeded in replacing the uterus by steady pressure for about ten minutes. Pituitrin was given intramuscularly and the uterus douched; it contracted immediately and there was no haemorrhage. For about three days following reposition she had a swinging temperature and an offensive vaginal discharge. This cleared up with douches and she was discharged from hospital three weeks later in perfect health.

The points of interest in this case were the extreme gravity of the shock, the slight amount of haemorrhage, the rapid contraction of the uterus after reposition, and the good results which followed upon early reposition with removal of the placenta as a preliminary.

I am indebted to Dr. Cleveland Smith for permission to publish this case.

ROBERT R. FOOTE, M.R.C.S., L.R.C.P.Lond.

Southend-on-Sea.

IDIOSYNCRASY TO MERCURY.

MISS K., aged 26, came to me complaining of a painful eye condition. On examination the lids were seen to be oedematous with small pearlish blebs on the skin surface; there was a good deal of injection of the conjunctivae, with similar blebs on them. She complained of excessive watering of the eye, blurred vision, and photophobia. On the posterior surface of the auricle and skin adjoining were erythematous pearl-like blebs. All down one side of the neck over the distribution of the fibres of the trapezius was a distinct shotty erythema.

The case appeared a puzzle until I went into the question of occupation. The patient had lately engaged herself as a dental nurse, and I ascertained that she had been clearing up amalgam fillings, and had touched some globules of mercury. Evidently she had rubbed her eye with the finely divided metallic mercury, and set up slight mercurial poisoning. She had some slight watering of the mouth, and the parotid was very tender.

Evidently the case was one of special idiosyncrasy to mercury, and I congratulated myself that I had not ordered her a mercurial ointment as treatment for the conjunctivitis.

After using a weak solution of potassium permanganate and some cocaine drops for the eye, the rash and other symptoms disappeared in a week.

Bath. FELIX MEINÉ, M.B., Ch.B.Edin.

IN 1922 there were 386 cases of typhus in Germany as compared with 533 in 1921. Almost all of the cases occurred among immigrants and refugees.

ACCORDING to the *Journal Officiel* the number of marriages in France during 1922 was 383,220, or 73,000 less than in 1921 and 240,000 less than in 1920. The number of divorces was 27,684, or 4,873 less than in 1921 and 1,472 less than in 1920. The excess of births over deaths has diminished on the whole, but was higher in 1921 in nine departments—namely, Pas-de-Calais, Lozère, Corrèze, Ardèche, Saône-et-Loire, Haute-Savoie, Indre, Ain, Aube.

British Medical Association.

CLINICAL AND SCIENTIFIC PROCEEDINGS.

CAPE OF GOOD HOPE—WESTERN PROVINCE BRANCH.

A MEETING of the Cape of Good Hope (Western Province) Branch was held in Cape Town on May 25th, when the President, Dr. C. M. MURRAY, presided, and thirty-five members were present.

Caesarean Section.

Sir EDMOND S. STEVENSON read a paper on Caesarean section. He dwelt on the danger of the scar rupturing at a subsequent confinement, and spoke at length on the difficulties of sterilizing a woman at the time of section. The indications which he laid down for Caesarean section were accidental haemorrhage, eclampsia, and placenta praevia. As regards operation he favoured the lower uterine segment scar. Professor E. C. CRICHTON congratulated Sir Edmond Stevenson on his courage and spirit in contributing a paper in spite of his advanced years. The paper gave a true account of the operation of thirty years ago, but ideas had changed materially, and the indications laid down by Sir Edmond were no longer accepted in their entirety. He agreed as to the great importance of placing swabs in the abdomen before opening the uterus. Dr. C. W. COMRIE-SHARP described his own technique. Dr. D. H. WESSELS agreed with Professor Crichton regarding the indications for operation. Contracted pelvis was rare in Cape Town. He thought that if placenta praevia was seen late, Caesarean section might be considered. He thought the personality and lengthy experience of the speaker had lent tremendous interest to a paper which had shown very clearly how much the conception of this operation had changed. Mr. C. C. ELLIOTT remarked how rarely Caesarean section was carried out in South Africa; in a very large experience he had only performed the operation three times. Sir EDMOND STEVENSON replied to the discussion, and the PRESIDENT thanked him on behalf of the Branch for his contribution.

Care of the Pregnant Woman.

Dr. C. W. COMRIE-SHARP read a paper on the care of the pregnant woman. He gave an entertaining historical review of the origin of conception, and detailed many of the weird beliefs still held by native races in South Africa. He then detailed modern advances in the manner of dealing with the pregnant woman, and dwelt on the methods and teaching of Ballantyne, the father of the new gynaecology. Dr. R. LANCE IMPEY emphasized the importance of ante-natal care, and suggested that the reduction of high infantile mortality turned on the better education of the medical student and the rigid prosecution of modern methods of ante-natal supervision. He discussed the great advances made in dealing with syphilis *in utero*. Professor CRICHTON, Dr. D. H. WESSELS, Dr. SIMPSON WELLS, and Mr. A. REITH FRASER also discussed the paper.

Treatment of Genital Prolapse.

Dr. R. LANCE IMPEY read a paper on the treatment of genital prolapse. In a brief review of the anatomy and physiology of the pelvis, he showed how the pelvic viscera were kept in position by three sets of forces—namely, intra-abdominal pressure, the pelvic diaphragm, and the parametric tissues; the great importance of the last was emphasized. He gave his personal experience—gained when working at the Royal Infirmary, Edinburgh, St. Mary's Hospital, Manchester, and the Michigan University Hospital, U.S.A.—of the three best known types of operation. In his opinion the essential points when operating were (1) to shorten the elongated parametric tissues, (2) to repair the pelvic floor, and (3) to keep the uterus anteverted. Vaginal plastic surgery gave the best results, and abdominal intervention was unnecessary. The operation introduced by Fothergill was described and illustrated by means of diagrams. He strongly recommended this operation for general use. Dr. D. H. WESSELS entirely agreed with everything Dr. Lance Impey had said. He had himself adopted Fothergill's operation, and deprecated opening the abdomen for genital prolapse. Professor E. C. CRICHTON also spoke.

Reports of Societies.

THE LARYNGOLOGICAL SUMMER MEETING.

THE summer meeting of the Section of Laryngology of the Royal Society of Medicine was held—for the first time outside London—at Manchester Royal Infirmary on Friday and Saturday, June 15th and 16th, and was extraordinarily successful. The President, Mr. C. A. PARKER, was in the chair, and over sixty laryngologists were present from some thirty different centres, including London, Manchester, Edinburgh, Glasgow, Dublin, Belfast, Newcastle-on-Tyne, Leeds, Sheffield, Harrogate, Blackpool, Liverpool, Stoke-on-Trent, Birmingham, Leicester, Nottingham, Norwich, Reading, Cardiff, Bristol, Worcester, Bournemouth, and Brisbane.

The meeting was opened by the PRESIDENT on Friday morning, when Dr. DOUGLAS GUTHRIE (Edinburgh) read a paper on chronic hyperplasia of the upper jaw and its relationship to other osseous tumours.

Chronic Hyperplasia of the Upper Jaw.

Dr. Guthrie described two cases, a girl aged 16 and a boy aged 4, both of whom presented a uniform, painless enlargement of one upper jaw, due to the exuberant growth of soft cancellous bone. The alveolus was greatly thickened on the affected side and the maxillary antrum almost obliterated. A number of lantern slides were shown to illustrate the osseous tumours of the upper jaw which might bear some relation to chronic hyperplasia. Leontiasis ossea, for example, was, he said, a name somewhat loosely applied to any bony enlargement of the facial bones and might commence as a hyperplasia of one maxilla, but as a rule the lesions were multiple. The tropical disease known as goundou, or symmetrical exostoses of the nasal processes of the maxilla, appeared to be the result of some infective condition within the nose. Unilateral hypertrophy of the face—the strange congenital anomaly described by Greig and others—was an enlargement of normal tissues, without hyperplasia, and might possibly be caused by localized meningitis or neuritis during intrauterine life. The pathogenesis of these osseous enlargements was worthy of further study. In the museum of the Royal College of Surgeons, London, there were, said Dr. Guthrie, three specimens of chronic hyperplasia of the upper jaw. One, from a woman aged 35, whose right upper jaw had been the seat of a painless enlargement for ten years, was described by Christopher Heath in his classical work. The jaw consisted of a uniform mass of porous bone and the antrum was much reduced in size. Another specimen was a jaw excised by Lord Lister, and the third has been described in detail by Sir Frank Colyer. A complete account of the disease was given by Westmacott at the International Medical Congress of 1913; he described eight cases, all of whom, save one, were females. The cause of the hyperplasia was unknown. It appeared to bear no relation to syphilis or tubercle, or to maxillary antral suppuration. The microscopic appearances suggested a reversion to the embryonic type of bone and presented a striking similarity to otosclerosis. Mr. G. J. Jenkins had recently demonstrated a relationship between otosclerosis and osteitis deformans, and it seemed probable, suggested Dr. Guthrie, that a similar relationship existed in the present instance, although it could not be concluded that two diseases were pathogenically identical even when the histological appearances seemed indistinguishable. The paper was discussed by Mr. F. H. WESTMACOTT, and by Mr. T. B. LAYTON, who described a similar condition found in chimpanzees.

Diseases of the Thyroid Gland.

Mr. F. HOLT DIGGLE (Manchester) discussed (1) the incidence of laryngeal paralysis in benign diseases of the thyroid gland, and (2) the effects of thyroid enlargements on the shape and position of the trachea. After quoting other

published figures as to the incidence of laryngeal paralysis, Mr. Diggle stated that of 34 cases which he had examined during the last eighteen months, 7 presented laryngeal or tracheal complications. Of these, one was an adductor paralysis in a case of exophthalmic goitre. In the six remaining cases, three were due to tracheal compression, one to the involvement of the right recurrent nerve in a perithyroid inflammation, one, a woman aged 43, with a large goitre, suffered from attacks of spasmodic dyspnoea associated with adductor spasm, and lastly, there was one case of hoarseness in a child. Mr. Diggle remarked that in the majority of cases the paralysis was unilateral and was more generally associated with intrathoracic or substernal goitres, and that by reason of the anatomical position of the recurrent nerves in the neck it was unusual to obtain vocal cord paresis without tracheal compression. Laryngeal paralysis occurred, however, in retro-oesophageal or retro-pharyngeal extensions of the thyroid gland. Referring to the involvement of the nerve in perithyroid adhesions, a case was quoted of a lady, aged 60, who had a right abductor paralysis due to haemorrhage into a cystic goitre. It was interesting to note that two months later (no operation having been performed) the paralysis had completely recovered. Radiograms were shown illustrating the bilateral or scabbard compression of the trachea in cases of parenchymatous goitres occurring in young adolescents. Mr. Diggle pointed out that it was essential in these cases to remove more than one lobe of the thyroid in order to prevent dyspnoea from subsequent tracheal displacement. The paper was discussed by Mr. TILLEY and Mr. SMURTHWAITE.

Malignant Disease of the Upper Jaw.

Mr. MUSGRAVE WOODMAN (Birmingham) gave a lantern demonstration illustrating the surgery and pathology of malignant disease of the upper jaw, in the course of which thirty-two coloured lantern slides were shown. He divided the growths of the upper jaw into intrinsic and extrinsic, and pointed out that, whether they arose from the air sinuses or from the outer walls of the jaw or tissues covering it, they sought and entered the antrum as the site of election. In the latter group of extrinsic growths, slides were shown illustrating epitheliomata and spheroidal-celled carcinomata arising in the palate and alveolus. Similarly squamous-celled carcinomata and rodent ulcer growing from the skin and various types of sarcomata growing from the base of the skull, including giant-celled sarcoma, were demonstrated. The endothelial sarcoma was considered the typical growth arising intrinsically from the air cells. Sections under low and high power were given of the normal ethmoid bone showing the air cells with their endothelial lining and bony walls. The series of slides showed transition from the normal structure to that of an endothelioma with typical vacuolated cells. Considerable emphasis was laid on the varied microscopical appearance shown by sections taken from various parts of the same tumour. Coloured slides were also shown of three operation cases: the first was a sarcoma of the base of the skull, which on exposure bled so seriously that the operation had to be abandoned. It was pointed out that the source of this haemorrhage was mainly the vertebral artery, and that ligature of the external carotid would not have checked the haemorrhage. The second was an extensive rodent ulcer of the face, which had become epitheliomatous and had destroyed the eye. This was excised completely and a photograph was exhibited showing that the operation area became eventually completely covered by epithelium. The third was a case of extensive recurrent endothelioma with secondary nodules in the region of the eye, the whole eye, together with the upper jaw, having to be excised. The growth was found to be adherent to the dura mater, where it was destroyed by diathermy. The patient made a good recovery, but suffered from considerable headache, which was probably due to increased meningeal pressure. These cases were shown to illustrate the wide scope of operative treatment in the region of the upper jaw, and the necessity of approaching each case with an open mind and of modifying the operation to suit the individual case and to deal with its complications. The demonstration was discussed by Mr. WILKINSON, and by Mr. SYME, who said that he had not found radium of much benefit in such growths.

The Lingual Tonsil.

Mr. J. ARNOLD JONES (Manchester) said that he had found that troublesome symptoms, such as an irritable cough, arose, particularly in neurotic women leading sedentary lives, from certain conditions of the lingual tonsil. He had obtained good results by local treatment with the cautery or silver nitrate and by giving ovarian extract internally. Mr. WILLIAM HILL, Dr. WATSON-WILLIAMS, Sir WILLIAM MILLIGAN, Mr. H. TILLEY, and other speakers deprecated the part played by the lingual tonsil in causing the symptoms described, and suggested that treatment of the neuroses alone would have given equally good results.

Large Foreign Bodies in the Gullet.

Dr. D. R. PATERSON (Cardiff) discussed the problem of the treatment of large foreign bodies impacted in the gullet. Sir WILLIAM MILLIGAN pointed out the value, in some cases, of the open operation, in place of attempting to remove the obstruction *per vias naturales*, and was supported by Mr. WILLIAM HILL. Mr. MUSGRAVE WOODMAN, while supporting the employment of the open operation, emphasized the danger of infection spreading to the mediastinum. Mr. LAYTON raised the point of whether removal of an impacted foreign body was an "urgent" operation, or whether it was justifiable to wait. It was generally agreed that waiting was quite justifiable in most cases; Mr. WESTMACOTT indicated, however, that copper coins should be attacked at once, as they quickly ulcerated.

After-Treatment of Maxillary Antrum Empyema.

Mr. LINDLEY SEWELL (Manchester) read a clinical note on the after-treatment of empyema of the maxillary antrum (Denker's operation). He detailed the steps of the operation and stated that he had obtained excellent results by discontinuing irrigations after operating. Mr. MUSGRAVE WOODMAN promised to try the effect of discontinuing irrigations; in performing the operation he thought it best not to cut but to crack the inferior turbinate and push it upwards to obtain free access. Mr. LAYTON had found physiological saline the best irrigation; Mr. GRAHAM BROWN gave the results of his large experience of antrum suppurations in Queensland; and Sir WILLIAM MILLIGAN, Mr. BANKS-DAVIS, Mr. WRIGHT, and Dr. GUTHRIE also took part in the discussion.

Evolution of the Nasal Sinuses.

Mr. J. F. O'MALLEY (London) read an interesting paper on the comparative anatomy of the nasal cavities and sinuses, and their evolution in relation to function.

Exhibition and Discussion of Cases.

After an excellent luncheon in the Medical Board Room of the Infirmary, given by the local committee to the visiting members of the Section, there was a demonstration and discussion of laryngological cases in the Throat and Ear Out-patients' Department. The cases were fifty-three in number, and elaborate arrangements had been made to facilitate examination by the members. Sir WILLIAM MILLIGAN showed a case of sarcoma of the left tonsil, successfully treated with radium; a case of epithelioma of the soft palate and left anterior faucial pillar, which had been and was again about to be diathermized; a case of epithelioma of the right vocal cord, successfully treated by laryngo-fissure and removal of the cord; a case of suppurative labyrinthitis successfully treated, so far as static symptoms were concerned, by extirpation of the left labyrinth; and (with Mr. F. WRIGLEY) a case, successfully operated upon, of orbital cellulitis complicated by invasion of the frontal sinus and osteomyelitis of the frontal bone, and a case of sarcoma of the right tonsil and faucial region treated by diathermy and external application of radium. Mr. F. H. WESTMACOTT showed, for diagnosis and suggestions, two cases of chronic oedema of the orbit, several cases of laryngeal growths, and a case of ulceration of the soft palate and left tonsil; he also showed several cases of laryngeal growths successfully treated by removal under suspension laryngoscopy. Dr. KNOWLES RENSHAW showed, for diagnosis, a case, possibly following injury twelve years previously, presenting a large, smooth tumour more than half filling the pharynx. Mr. J. ARNOLD JONES showed, among other cases, an extensive condition of tuberculosis of

the nose, pharynx, and larynx. Mr. LINDLEY SEWELL showed a case of epithelioma of the anterior pillar of the fauces and base of the tongue, treated by diathermy, and a case of lupus of the anterior end of the inferior turbinate, treated by electro-cautery puncture. Other cases were shown by Mr. FRANK WRIGLEY, Mr. A. A. SMALLEY, Mr. G. E. ARCHER, Mr. F. HOLT DIGGLE, and Dr. DAVID THOMSON.

Demonstrations.

On Saturday morning Dr. P. WATSON-WILLIAMS (Bristol) demonstrated his method of diagnostic bacteriological exploration of the nasal sinuses. This method, in brief, consists in attaching to a syringe a cannula suitable for entering the suspected sinus and sucking up the discharge, which is then placed in a sterile bottle and submitted to bacteriological investigation; it is usually helpful to inject a small quantity of sterile water into the particular sinus and then suck it back with the contained discharge. In adults the procedure is carried out under local anaesthesia (20 per cent. cocaine), but in children general anaesthesia is used.

Dr. IRWIN MOORE (London) demonstrated his method of reducing or destroying hypertrophied or diseased tonsils by means of the "London paste" of Morell Mackenzie—caustic soda and slaked lime. The paste is applied to the tonsils with a special applicator, under local anaesthesia (10 per cent. cocaine); this procedure, carried out once a week for about four to six weeks, causes a rapid reduction of the tonsillar tissue right down to the capsule. It is recommended only for cases in which operation is contra-indicated or persistently refused.

In the new *X*-Ray Department of the Infirmary—which was greatly admired—Dr. MORISON (Manchester) gave a demonstration of radiograms illustrating "cardiospasm," and initiated a discussion on the subject, in which Mr. WILLIAM HILL and others joined. Dr. TWINING showed *x*-ray photographs of normal and diseased mastoids; and Dr. ANDERSON demonstrated methods of treating by *x* rays malignant conditions of the throat.

In the Radium Institute, Nelson Street, Dr. A. BURROWS exhibited interesting cases, and demonstrated methods of the application of radium.

Sir WILLIAM MILLIGAN performed a number of operations, including radical mastoid and skin grafting, acute mastoid (blood-clot method), and enucleation of tonsils; and Mr. F. H. WESTMACOTT carried out operative procedures with the aid of suspension laryngoscopy.

Annual Dinner.

The annual dinner of the Section of Laryngology was held on Friday evening at the Clarendon Club, with Mr. C. A. PARKER, President, in the chair. The toast of the Section of Laryngology was proposed by Sir HENRY MIERS, Vice-Chancellor of Manchester University, and the PRESIDENT—who had discovered that he was an old school-fellow of the Vice-Chancellor—replied. The health of the guests was proposed in felicitous phrase by Sir WILLIAM MILLIGAN, and Dr. C. H. MELLAND replied. Mr. LINDLEY SEWELL, who acted with great success as local secretary of the meeting, told some of his inimitable Lancashire (and fishing) stories; and Mr. LAYTON and Mr. O'MALLEY, secretaries of the Section, were also called upon to speak.

GYNAECOLOGICAL CASES AND SPECIMENS.

A MEETING of the North of England Obstetrical and Gynaecological Society was held at Leeds on May 25th, when Professor E. O. CROFT showed a specimen of axial rotation of the right Fallopian tube and ovary.

The ovary was enlarged by a small cyst; it was removed from a patient 36 years of age, whose fourth child was born eight years before. Menstruation did not return after weaning the baby; a year later part of an enlarged thyroid was removed. After three years' amenorrhoea she had one very slight show of blood followed by a normal pregnancy and labour; menstruation has not reappeared. For some months she has had irregular labour-like pains, some difficulty in micturition and defaecation, but no bleeding. On March 12th an irregular, rounded, soft lump in the pouch of Douglas displaced the uterus forwards. Professor Croft remarked on the rarity of the extreme rotation of a tubal swelling—probably inflammatory or hydrosalpinx—and the mechanism of rotation of such a small swelling with a relatively broad pedicle; on the amenorrhoea which existed from the fourth child eight years ago, probably associated with the enlarged thyroid and its subsequent removal and observed that the amenorrhoea was not associated with sterility.

Mr. R. A. HENDRY showed a hydatidiform mole with considerable epithelial overgrowth, suggesting the possibility of chorion-epithelioma.

The patient was 30 years of age, had had two children, the last six years ago. Menstruation ceased in October, 1922. Vomiting began during the second month and became severe. There had been occasional shows since December, and a fortnight's bleeding preceded the passage of hydatidiform mole on February 17th. The uterus was about one inch above the umbilicus; no data as to the rapidity of uterine enlargement were obtainable. The patient was transferred to Liverpool Royal Infirmary, where, after anterior hysterotomy, the uterine contents were cleared out and the cavity explored digitally. Sections of the mole showed an unusually active growth of both syncytium and Langhans's layer, suggestive of chorion-epithelioma. Since the abortion she has had three menstrual periods, the first two at intervals of four weeks, the last after two weeks' interval—the ovaries were then slightly enlarged. She had now gone three weeks without bleeding and the ovarian enlargement had disappeared.

Mr. A. GOUGH showed a fibroid uterus removed by abdominal pan-hysterectomy combined with colporrhaphy.

The patient was 46 years old, and had prolapsus uteri since her only confinement nine years before. For several years menstruation had been increasing. On examination, the cervix was procident, and the uterus formed a firm, globular mass almost filling the pelvis. At the operation a quadrilateral colporrhaphy incision was made and vaginal hysterectomy begun; the uterus could not be brought down and was removed through an abdominal incision, and the vaginal repair was then completed.

Dr. J. W. BRIDE described a case of obstructed labour due to carcinoma of the bladder.

The patient was aged 49, had had seven normal labours, and was admitted, eight and a half months pregnant, to St. Mary's Hospital, Manchester, with a growth from the bladder projecting into the vagina. She had been an in-patient at the Manchester Royal Infirmary about a year previously, when the bladder growth was recognized as a carcinoma; it was operable, but the patient declined operation. Labour was obstructed by a hard indurated mass, the size of a Tangerine orange, firmly adherent to the pelvic arch. A living child, 6 lb. 14 oz. in weight, was removed by Caesarean section, but maternal death ensued from exhaustion.

Mr. J. ST. GEORGE WILSON showed a hydatidiform mole with unusual features.

The patient, a 3-gravida, was 25 years old; her last child was born in July, 1921; menses ceased on March 16th, 1922; and the baby was weaned in May at the onset of morning sickness. In January, 1923, a month overdue, there was two days' bleeding; on January 30th, on examination the uterus corresponded to a sixteen weeks' gestation, and alternately contracted and relaxed. On February 26th, as the uterine condition was unchanged, three bougies were inserted; on March 2nd the mole was expelled with few pains and little bleeding. The mole consisted of a pyriform mass of vesicles with an incomplete decidual covering; section disclosed an amniote sac containing a 12 mm. embryo.

Professor CROFT reported the after-history of a multipara aged 38 years, who consulted the late Mr. Wright in October, 1897.

A gradually increasing sore had existed for about eighteen months. On examination a raised oval growth, about 2/3 inch in its longest diameter, was seen on the inner aspect of the right labium majus. There was no history nor other evidence of syphilis. Mr. Wright removed the growth freely, but did not remove any glands from the groins. The growth was examined by Mr. F. E. Taylor and also by the late Mr. Targett, and the appearances were those of typical squamous epithelioma. A year later the patient had some uterine haemorrhage—probably an early abortion—a small polyp was removed and curetting was performed. In 1902, five years after the operation, the inguinal glands were enlarged, and the patient came under the care of Professor Croft, who cleared the glands away. The patient was not seen again until February, 1923, twenty-six years after the primary operation; she was now 61 and came with various neurotic complaints, including some pain in the right side of the pelvis. A thorough pelvic examination revealed no evidence at all of any physical disease and, except for the scars, both the vulva and the groins were normal. The facts of the case are all carefully noted in the hospital records, and the pathological report was as reliable as it could be.

A POST-GRADUATE course on orthopaedics will be held under the direction of Dr. F. Calot, at Berck-Plage, Pas-de-Calais, from August 6th to 13th. The subjects will include non-pulmonary tuberculosis, congenital and acquired deformities, the treatment of fractures, etc. Demonstrations will be given in English and Spanish, and the fee is 150 francs. The number of places is limited, and early application should be made to Dr. Fouchet, Institut Calot, Berck-Plage, Pas-de-Calais, France, or 69, Quai d'Orsay, Pari-

Reviews.

PSEUDO-APPENDICITIS.

THE general belief that all pains in the right iliac fossa are due to appendicular disease shows little sign of abating. There is no doubt that the public are very greatly to blame for this. The man in the street has learned that if you have appendicitis you have pains in the right iliac fossa. Unfortunately he believes the converse to be equally true: pains in the right iliac fossa must, he thinks, be due to appendicitis. The general practitioner and the surgeon who try to disillusion the chronic sufferer often get but small thanks for their trouble. In a small, but exceptionally clearly expressed book[1] TH. DE MARTEL and ED. ANTOINE have a tilt at this windmill. They concern themselves with the symptomatology, diagnosis, and treatment of "the painful syndromes of the mobile caecum and proximal colon." They point out that colonic mobility may give rise to no trouble, and may to that extent be considered normal. They regard the troublesome cases as failures of compensation. We have long been taught that it is the uncompensated heart which is the truly diseased heart, and so, according to these authors, is it with the colon. The book has the advantage of being written by a surgeon and by a physician in collaboration. Great stress is laid on medical treatment, details of which are given, and the authors very rightly say that no surgical treatment is successful unless aided by careful and intelligent attention to diet, bowel action, and general hygiene. They believe that all the pains which arise from the supposed abnormalities of the colon are mechanical in origin, being chiefly due to back pressure and dilatation of the caecum. There is a good account of the acute crises which are apt to arise, the chief point in differential diagnosis being the sudden and early relief of the pain (one to three hours) by the release of gas from the distended caecum. They point out that abnormal caecal mobility, caecal ptosis, ptosis of the hepatic flexure, ptosis of the whole proximal colon, Jackson's pericolic membrane, and the "shot-gun" hepatic flexure have a common symptomatology and that it is usually impossible accurately to distinguish the one from the other by the clinical history alone or by examination without *x* ray.

M. de Martel has little faith in caeco-plication or in any of the fixation operations. He performs, nine times out of ten, a short-circuiting followed by a greater or lesser colectomy at a later date, but only if the occasion demands it. Section of bands, dissection of veils, and fixations have not given him such good results. As regards operation, a very healthy conservatism is maintained, and he insists on the necessity for a very wide abdominal exposure if any real good is to be done.

The book should make a wide appeal. It is easy to read, it is well arranged, and the few illustrations are very clear.

TWO BOOKS ON CANCER.

ALTHOUGH the public are well aware of the frequency of cancer, and appear often to have an exaggerated idea of its painfulness, they are not so well informed of the nature of malignant disease as of certain other diseases, such as typhoid, dysentery, or anthrax, which are really rarer. This want of knowledge is often betrayed by the questions asked in conversation, and has lately been reflected by the inaccurate information contained in the correspondence of the press. To remedy this defect Dr. C. E. WALKER has written a popular book entitled *Theories and Problems of Cancer*,[2] in which he presents the modern orthodox views as to the origin and spread of cancer in such a way as to render the information intelligible to the ordinary reader. The book is largely a reproduction of a series of articles written for *Science Progress* in 1912, but in its present form contains also an account of the advances made in subsequent years, notably the experimental production of cancer in animals. The difficulties of addressing an audience unfamiliar with the technical vocabulary of pathology have been overcome by simple methods of expression, but, thanks to the careful choice of language, the book has not lost in accuracy. Though not by any means easy reading, it could be followed without the assistance of a scientific dictionary by a person of average education. The book correctly represents accepted teaching concerning the development of malignant disease, but is saved from being "dry" by references to the author's own researches which afford a personal touch. After reviewing the many experiments in treatment which have been tried at different times, Dr. Walker states that "the only conclusion to be arrived at is that at the present time the only means available which affords any reasonable chance for the patient is complete removal by a surgical operation." Under surgical treatment he includes also the action of agents such as *x* rays or radium, which kill the cells of the malignant growth instead of removing them.

Quite another opinion is aggressively advocated by Dr. JOHN SHAW in his recent book *Cancer: Fallacy, Theory, and Fact*.[3] Dr. Shaw has a poor opinion of cancer research, and declares that experiments on animals have led to lamentably fallacious results. Misled, as he thinks, by the teaching of research workers, surgeons have embarked on extensive operations which, he argues, have had the double effect of increasing the mortality from cancer and actively spreading the disease. He holds that cancer is a preventable disease and a curable disease; the former object is to be achieved by obedience to certain hygienic laws, and the latter can be assured by medical treatment. The methods of treatment he most relies on are the application of the constant current, radiant heat, pressure, injections of oxygen, external remedies, and animal extracts, such as that of the thyroid gland. The author defends his conclusions by a detailed account of about forty cases of cancer affecting different organs of the body successfully treated by such tranquil therapeutics.

Thus these two books lead to diametrically opposite conclusions, but were they to fall into the hands only of those readers for whom they were intended there would be no cause for misgiving as to the influence they may exert. Dr. Walker's excellent exposition of the cancer problem is carefully prepared for non-medical readers, and it is to be hoped that it will have a wide circulation. Dr. Shaw's controversial opuscule has for its object the enlightenment of the medical profession, and the restraint of what he has persuaded himself is the barbarous practice of surgeons. We trust it will have a wide circulation amongst them, but, such is the perversity of human nature, we shall probably find the laity will become much better acquainted with the fruit of the tree of knowledge intended for their medical brethren than with that provided for themselves.

HAEMORRHAGIC JAUNDICE.

THE valuable monograph on the morbid anatomy of spirochaetosis icterohaemorrhagica,[4] by Dr. RENJIRO KANEKO, professor at the medical clinic at the University of Fukuoka, Japan, is the outcome of his wish to make known to European readers investigations which had previously been published mainly in Japanese literature. The book is divided into three parts. The first contains a review of the literature up to the time of the discovery of the *Spirochaeta icterohaemorrhagiae* by Inada and Ino in 1915, when only 30 cases had been described in Europe and 7 in Japan. Apart from icterus and haemorrhages, the chief lesions described by the earlier writers were inflammatory or degenerative changes in the liver and kidneys and enlargement of the spleen. The second part contains an account of Professor Kaneko's own elaborate investigations, which were based on 42 cases, of which a clinical and

[1] *Les Fausses Appendicites: Étude clinique, radiologique et thérapeutique des syndromes douloureux du caecum et du colon proximal.* By Th. de Martel and Ed. Antoine. Paris: Masson et Cie. 1922. (Imp. 16mo, pp. 189; 31 figures, 10 plates. Fr. 10.)

[2] *Theories and Problems of Cancer.* By C. E. Walker, D.Sc., M.R.C.S., L.R.C.P. London: Published for the University of Liverpool Press by Hodder and Stoughton. 1923. (Cr. 8vo, pp. 126; 3 illustrations. 5s. net.)

[3] *Cancer: Fallacy, Theory, and Fact.* By John Shaw, M.D.Lond. London: George Routledge and Sons, Ltd. 1923. (Demy 8vo, pp. viii + 185; 13 plates. 10s. 6d. net.)

[4] *Ueber die pathologische Anatomie der Spirochaetosis icterohaemorrhagica Inada (Weilsche Krankheit).* By Professor Dr. Renjiro Kaneko. Vienna, Leipzig, Munich: Rikola. 1922. (Roy. 8vo, pp. 181; 8 plates.)

anatomical study was made and the diagnosis confirmed by finding the causal organism. The third part is a critical review of the literature which has appeared since the discovery of the *Spirochaeta icterohaemorrhagiae* in February, 1915, and the writer's first article on the morbid anatomy of the disease in the same year.

In addition to the generalized jaundice, numerous small haemorrhages, severe renal disease, and degeneration of the skeletal muscles described by other writers, Professor Kaneko emphasizes the diagnostic importance of the following pathological features: (1) obstruction in the bile capillaries without mechanical obstruction in the large bile ducts; (2) inflammatory and degenerative changes in the heart muscle and in the nerve cells and fibres; (3) certain negative findings, such as the absence of the so-called infective spleen, fatty degeneration, and severe extensive necrosis and suppuration.

The work contains a bibliography, and is illustrated by microphotographs, some of them in colours.

ELEMENTS OF TUBERCULOSIS THERAPEUTICS.

THE French volume on the treatment of pulmonary tuberculosis[5] is one of a series of monographs on treatment, written primarily for the general practitioner. With this end in view practically all discussion of the various problems presented by the disease is omitted; the scientific side is completely suppressed, and just a plain, straightforward account of the conduct of a case is provided. As in every book, there are one or two subjects upon which the author lays particular emphasis—subjects making an individual appeal to the author himself. Such subjects are climatology and the treatment of haemoptysis. Practising at Cambo, a pleasant little health resort in the foothills of the Pyrenees, he naturally is impressed with the importance of the different types of atmospheric and environmental conditions in the treatment of his patients, and is, therefore, careful to give a fairly liberal account of the more popular places of resort for tuberculosis patients, and to indicate the type of case for which each is suited. With regard to haemoptysis his main contribution has to do with the different modes of treatment to be applied to the patient, depending on whether the blood pressure is above or below normal. In the latter case the usual remedies are recited—rest, bandaging of the limbs, calcium lactate, posterior lobe of the pituitary, etc.—but in the former case he recommends the intramuscular injection of emetine, which he regards as of the greatest value in lowering the systolic pressure and diminishing the haemorrhage from the lungs. The remainder of the book calls for little comment. A considerable amount of space is devoted to drug treatment and to the use of serums—more than is usual in an English manual. Artificial pneumothorax is dealt with very fully, and the treatment of pulmonary tuberculosis in infancy, old age, pregnancy, and diabetes is carefully considered. To those who care for a simple, clear, somewhat empirical description of the treatment of disease we would recommend this book unhesitatingly.

DIATHERMY.

IN a volume entitled *Diathermie et Diathermothérapie*[6] Professor BORDIER has written on the physics, electrotechnics, and therapeutics of diathermy. The principles on which high frequency and diathermy currents are generated, the various types of apparatus which produce these currents, the physical and physiological properties of diathermy, are described in the first three parts of the book. The fourth part deals with the various methods of performing the operation of coagulation by diathermy. In the fifth part the tumours and infective granulomata of different regions which may with advantage be treated by diathermic coagulation are considered. The author describes his methods and results and those of other workers. Medical diathermy is considered in a similar way in the fifth part. Methods of applying diathermy are described, and the author then states, under the headings of the different systems of the body, the diseases for which diathermy is a valuable method of treatment.

The advantages of diathermy for the destruction of malignant growths are well known to many English workers, but Professor Bordier also recommends this form of treatment for other morbid conditions for which, in this country, it has been less widely used. Among these may be mentioned haemorrhoids, lupus (certain forms), rhinophyma, and enlargement of the prostate. Professor Bordier has used diathermy for the cauterization of external and internal haemorrhoids for ten years; his patients were not confined to bed after the operation, and no post-operative accidents are mentioned. He recommends diathermy for the treatment of rhinophyma; the operation, he says, can be performed without loss of blood. For enlargement of the prostate he advises a wider trial of diathermy for the purpose of cauterization of the gland where it narrows the channel, so making a wider outlet for the passage of the urine. He quotes the work of Luys, who has had considerable experience in the method. The patients were treated under local anaesthesia and were not confined to bed after the operation.

In the section on medical diathermy some interesting reports are given of this form of treatment on chronic gastritis accompanied by alteration in the degree of acidity of the contents of the stomach. Test meals were given before and after a course of diathermy and the analyses showed a return to normal; the patients were relieved of their symptoms.

Professor Bordier has evidently had a wide experience of diathermy, and his results will be read with interest by English specialists. He admits that French workers have had less experience in the treatment of malignant growths by diathermy than English laryngologists. He freely quotes the work of English authors, and some of the tables and illustrations in an English work on diathermy are reproduced.

The volume under review contains a large quantity of useful information. It is clearly written and well illustrated.

A USEFUL GUIDE.

THE neophyte, fresh from the schools, proud in the possession of full knowledge of the books and of cases carefully selected to demonstrate the exactness of medical science, has many a fall when he bursts his bonds and spreads his wings in the free air of general practice. In this atmosphere one attribute counts more than all others, and that is—experience; and however well he has been taught, and with whatever diligence and zeal he has studied, this the fledgling cannot have.

It is to anticipate for him some of the pitfalls and the gins of general practice that Dr. A. CAMPBELL STARK has compiled a little book which he styles *An Index to General Practice*.[7] In an admirable and all too short preface and introduction Dr. Stark explains that he writes solely from the point of view of a general practitioner, and seeks an apologia for the book in "the curious fact that although a large majority of medical students go into general practice, no attempt is made during their curriculum to train them for their special work." He further regrets that "experience of general practice is not an indispensable qualification for election to a hospital staff"; that "writers of textbooks, and others who cater for the needs of the medical profession, have little for the general practitioner, and he is left to work out his own salvation." Probably Dr. Stark would agree that in the working out of his salvation lies the practitioner's true source of strength. No man can be a success in practice without first "going through the mill," and it is good for the young practitioner that the way is hard, for thus his character is moulded, and thus, out of necessity, he acquires those weapons with which his hospital training does not equip him.

There is, nevertheless, every reason for complaining that he is not sufficiently warned of the kind of thing

[5] *Le Traitement de la Tuberculose Pulmonaire en Clientèle.* By C. Colbert. Comment Guérir? Bibliothèque des Praticiens. Paris: A. Maloine et Fils. 1923. (5¼ by 7½, pp. 291; 12 figures. Fr. 10.)

[6] *Diathermie et Diathermothérapie.* By Dr. H. Bordier, Professeur Agrégé à la Faculté de Médecine de Lyon. Paris: J. B. Baillière et Fils. 1922. (Post 8vo, pp. 512; 137 figures. Fr. 30.)

[7] *An Index to General Practice.* By A. Campbell Stark, M.B. and B.S.Lond., L.S.A.Eng., Ph.C. London: Baillière, Tindall, and Cox. 1923. (Cr. 8vo, pp. x + 181. 5s. net.)

he is likely to meet when he takes upon himself the great responsibility of entering general practice. This want Dr. Stark's book to some extent fills, and a careful study of it, and reference to it when in difficulties, will lessen (especially for the young practitioner) the number of those unpleasant surprises which lie in wait for us all, however experienced and watchful we may be. The book, being written by a general practitioner, can be strongly commended to the attention of the final year student and hospital resident; it will increase his respect for and understanding of the general practitioner, an individual he is rather apt to look upon with indulgent superiority.

The book consists of a series of notes arranged in alphabetical order—hence the title of the work; by a curious chance it begins with Alcoholism and ends with Venereal disease. The intervening pages hold a great variety of hints, tips, original observations, shrewd advice, and a little philosophy. To many of the notes is appended a short bibliography—a very useful guide in these days of a bewildering multiplicity of books and an equally bewildering scarcity of time and money.

The book does not call for criticism in detail; we may disagree with the author occasionally as one practitioner is bound to differ from another, but the difference is often only one of method—we all use the tools which seem to us best. The advice given is the product of the long experience of an able and alert general practitioner, and those who are setting out on the same journey will avoid many a wrong turning by having his little guide-book with them.

PLANT BIOCHEMISTRY.

THE second volume of *Chemistry of Plant Products*,[8] by P. HAAS and T. G. HILL, presents a sketch of life processes of plants from the chemical point of view. It continues the study begun in the first volume which deals with the nature and significance of the commoner organic compounds of plants. The authors disclaim an intention to give a full account of the literature of the subject, but have attempted to produce a work which will form a basis for further study. It is not to be expected that they have succeeded in reducing this basis to rules which are simple or few, or that they have cleared up more than a few of the many obscurities existing among the metabolic processes of plants. The study of the subject has not yet advanced to a stage to permit this to be done. For the most part, therefore, the information has had to be presented in terms descriptive of the results of experiment; but the plan is commendable and no opportunity has been lost of showing the correlation of interdependent functions. Some of the assumptions made by the authors appear arbitrary. They have chosen to define their subject as being in its broad aspect "the study of the origin of life." We are inclined to think such an aim mistaken. We may pass Blackman's epigram on the stimulus caused by wounding, that "precisely the same effect is produced by peeling a potato as by flaying a saint," but when the action of chloroform and ether on plant respiration is set down as the action of anaesthetics, there is surely a risk of confusing the meaning of the word anaesthesia.

The authors have clearly made a very broad study of the subject and they have bestowed great care on the preparation of this volume; they have recognized those facts which it is most important the student should grasp, and have not failed to give some cautions, as for example their remarks on the disturbing effect in comparative experiments of previous fatigue, or suffering of the organ under experiment. The fact that when a function depends on a number of separate factors the rate at which it progresses is limited by the slowest factor is illustrated in many ways. The index is good and references are provided to the more important contributions of original work.

[8] *An Introduction to the Chemistry of Plant Products.* By P. Haas, D.Sc., Ph.D., and T. G. Hill, A.R.C.S., F.L.S. Vol. II: Metabolic Processes. London and New York: Longmans, Green and Co. 1922. (Demy 8vo, pp. viii + 140; 11 figures. 7s. 6d. net.)

NOTES ON BOOKS.

IN his work on the clinical aspects of internal secretions Dr. G. PERITZ of Berlin discusses in an introductory chapter the nature of hormones and the relation of the various endocrine glands to one another, and then in the eight succeeding chapters deals in turn with the hypophysis, pineal body, genital glands, suprarenals, pancreas, thyroid, parathyroids, and thymus. Syndromes such as osteomalacia and scleroderma, believed to be due to defect of more than one gland, are then considered. A chapter on the chemistry of the internal secretions is followed by another on the relations of the internal secretions to the nervous system, including a description of physical and pharmacological functional tests. The work ends with a chapter on constitution and internal secretion in which the author comes to the conclusion that the internal secretions of the thyroid and parathyroid have the most important influence upon the temperament of the individual, while the hormones of the sexual glands act much more powerfully on the will. In the normal subject all the hormones are in a condition of equilibrium with only slight predominance of one hormone over another according to the mode of reaction of the nervous system. The book is illustrated by numerous photographs and skiagrams.

The handbook of chemical, microscopical, and parasitological diagnosis, edited by JULES GUIART, professor of parasitology in the Lyons Medical Faculty, and L. GRIMBERT, professor of biological chemistry in the Paris Faculty of Pharmacy, of which the fourth edition[10] has recently been published, is divided into two parts. In the first a general description is given of microscopical, bacteriological, and chemical technique, and in the second is an account of the principal tissues and secretions and of the various animal parasites. The new edition, the appearance of which has been delayed by the war, has been brought up to date by inclusion of the new methods employed in the army laboratories for the rapid diagnosis of infectious diseases, especially malaria, typhoid, and paratyphoid fevers, diphtheria, and cerebro-spinal fever. Numerous additions have been made to the chemical portion of the work, such as a description of lipoids and cholesterin in the blood, the determination of Ambard's constant, the urinary acidity, the dosage of urea, ammonia, and oxybutyric acid in the urine, and the new methods for testing albumin. Important changes have also been made in the chapters dealing with the gastric juice and the cerebro-spinal fluid. The work is copiously illustrated with plain and coloured illustrations, and, unlike most French works, is provided with a full index.

[9] *Einführung in die Klinik der inneren Sekretion.* By Professor Dr. G. Peritz, Nervenarzt in Berlin. Berlin: S. Karger. 1923. (Roy. 8vo, pp. viii + 257; 31 figures.)

[10] *Précis de Diagnostic chimique, microscopique et parasitologique.* Par J. Guiart et L. Grimbert. Quatrième édition. 1922. Paris: J. Lamarre. Cr. 8vo, pp. xx + 1010; 548 figures, 4 plates. Fr. 44 net.)

MEDICAL AND SURGICAL APPLIANCES.

A Ureteral Catheterization and Pyelography Outfit.

MR. J. ALBAN ANDREWS, M.C., F.R.C.S. (Resident Surgical Officer, St. Peter's Hospital for Stone), has had made for him by Mr. J. H. Montagu (69, New Bond Street, W.1) a box to carry apparatus for ureteral catheterization and pyelography in compact form, and sterilized for immediate use. The advantage claimed for it is that, apart from its portability, the contents are available with a minimum of handling when it is required to pass a ureteral catheter or introduce a pyelographic medium. The box is of the flat oval pattern introduced by Mr. Swift Joly for holding ureteral catheters. In the lid is a series of six clips, arranged round the margin, for holding spare ureteral catheters, and one or two phospho-bronze stilets useful in clearing a blocked catheter; in addition, two clips in the centre hold a pair of forceps for manipulating the catheters, etc. In the base, fixed round the margin, is a series of eight racks, with a hinged clip attached to each; by means of these racks four ureteral catheters can be coiled within the box, each lying in a separate compartment of a given rack. A triangular container, with perforated sides, and a detachable wire-mesh lid holding cotton-wool soaked in a strong solution of formalin, is so placed that when the four catheters are in position their proximal ends can be fitted to four fixed, tapered, hollow needles projecting from its base. Formalin vapour passes from the container, by way of these needles, into the lumen of the catheters; this is accelerated by warming the closed box; in this way the inner and outer surfaces of the catheters are both exposed to the action of the vapour. To ensure efficient sterilization care must be taken that the lumen of each catheter is quite clear, and that the exposure to the vapour is made for not less than twelve hours. Within the racks is a central oval space fitted with clips holding a 10 c.cm. all-glass syringe, a 5 c.cm. Record syringe, four single needles fitting both the 5 c.cm. and 10 c.cm. syringes, and three double needles. A catheter can be readily extracted, without disturbing those adjacent, by detaching its proximal ends from the fixed tapered needle with the forceps, and then withdrawing it smoothly from the racks.

NINETY-FIRST ANNUAL MEETING
of the
British Medical Association,
PORTSMOUTH, 1923.

OLD PORTSMOUTH AND PORTSEA.*

"Strange enchantments of the past
And memories of the days of old."

PORTSMOUTH is not all harbour and dockyard. If visitors to the Annual Meeting have a few minutes to spare after their attendance at the scientific Sections, and if the festivities of Southsea do not prove too alluring, or the Trades Exhibition at the Naval Barracks too attractive, there are a few relics of the drowsy past worth seeking out in old Portsmouth and Portsea. It will be interesting to wander for a space in the streets and places where Byng, Vernon, Anson, Hawke, Kempenfelt, Rodney, Keppel, Howe, Nelson, and scores of other famous officers were wont to walk and work and play. We may perhaps be able to recall to our memories forgotten facts, and repicture the places we see with the doings of the good old days. What yarns we might hear from the old "Blue Posts," the "Star and Garter," and the "George" could their walls but speak; what might not High Street, Broad Street, and Point tell us! Boys as midshipmites came quite young and fresh to Portsmouth; like Peter Simple, they stayed at the "Blue Posts," and then for the rest of their careers would be frequent visitors. As they climbed the service ladder the "Blue Posts" would be forsaken for the "Parade Coffee House," and finally the "Crown" and the "George" would be their temporary resting places. Their sojourns in old Portsmouth would be full of fun and adventure. Even young Nelson wrote:

"Yesterday I was riding a blackguard horse that ran away with me at Common (Portsea), carried me round all the works into Portsmouth by the London Gates, through the town and out at the gate that leads to Common, where there was a waggon in the road, which is so very narrow that a horse could barely pass. To save my leg and perhaps my life I was obliged to throw myself from the horse, which I did with great agility, but unluckily upon hard stones, which have hurt my legs and back, but done no other mischief. It was a thousand to one I had not been killed."

FIG. 1.—The Round Tower.

Little of old Portsmouth is left, and to find it the visitor must penetrate behind the modern frontages into some of the back streets, grubby and picturesque, but no longer the highways they used to be. Here and there he will find an old house—even a partly wooden house or two. The oldest portions of the town are or were at Point, on either side of Broad Street and around the Camber. There, in narrow and twisting lanes, old houses may be found with sixteenth and seventeenth century dates carved on their beams, mostly built of red brick and roofed with red tiles, here and there shingle fronted or more rarely half timbered. But the modern medical officer of health and the sanitary authorities have been at work, and have cleared away the old and antique that was pleasant to look on but dangerous and unhealthy to live in. Perhaps the oldest street of all is (or was, for now most of it is cleared away) East Street, running from Broad Street to the Camber, and the oldest public house, the "Shoveller's Arms," is still here, and was kept not many years ago by a family whose predecessors were there in the days of Nelson.

The neighbourhood of Point, which was outside the old town wall, has always been notorious. It was called Spice Island, but for what reason no one knows. The Camber remains the commercial harbour of Portsmouth, but there is nothing at the dockside indicative of prosperity. Portsmouth is naval first—everything gives place to the requirements of the navy—and commerce goes elsewhere. Here by the Quay is an old red brick building that once held all the food stores for the navy! In it was the biscuit bakery which was once visited by George III. A story is told that he set the fashion of munching biscuits in the streets, for he was observed eating a specimen in the roadway after visiting the naval bakehouse. After the Crimean War the old Cavalry Barracks at Gosport were taken over and converted into the present Victualling Yard.

From Point starts the floating bridge that connects Portsmouth with Gosport. From "the Bridge" when crossing a fine view of the harbour and dockyard is obtained. Haslar Hospital is also seen, and Haslar Creek, the home of the submarines. Many yachts and all kinds of naval craft may be seen at anchor or moving about the waters. Alas! the old *Victory*, that once rode so proudly in midstream, is now in dry dock undergoing repair. Here in the Royal Dockyard she may be visited, and for many long years may she remain the cynosure of the navy.

Right at the very end of Broad Street, opposite the ferry landing stage, is the "Star and Garter" hotel, which is perhaps the most interesting of all Portsmouth's inns. It has more historic associations than any other of the old houses. Here the very room and the bed is shown in which in their time have slept Howe, St. Vincent, Nelson, and Franklin. It is related that Lady Franklin, after the great arctic explorer had been given up for lost, used to come here year after year on a sacred pilgrimage. In the common room or naval snuggery one can in imagination picture the old seamen recounting their yarns and telling how things should have been done had they had their way. William IV, when Duke of Clarence, regularly occupied a room here from the window of which is obtained a fine view of the harbour with its varying interests. Louis Philippe, when an exile, was here a great deal. Dickens and Thackeray were frequent visitors. It is of interest to note that the third of the trinity of novelists, Sir Walter Scott, also visited Portsmouth in 1831. The deeds of the house date back to the time of Queen Mary, and the landlord still pays capon money to the corporation.

About half-way between the above house and the High Street is the site of the "Two Blue Posts," built in 1613, and once the chief posting house in the borough. The old house was destroyed by fire on May 7th, 1870. A new house has been built here since. The "Two Blue Posts" is frequently alluded to in Marryat's novels. It is recorded

* Previous articles on Portsmouth and Southsea and neighbourhood have appeared in the BRITISH MEDICAL JOURNAL of December 9th, 1922, p. 1137; January 13th, 1923, p. 77; February 10th, 1923, p. 253; June 2nd, 1923,

that on one of the old window panes was scratched the following inscription:

"This is the Blue Postesses
Where midshipmen leave their chestesses
Call for tea and toastesses
And forget to pay for their breakfastesses."

In the old days there was a large porch over the front door supported on two big columns which were painted a bright blue colour.

On the opposite side of the road is a narrow opening called Bathing Lane, leading to a spot now known as Bath Square, interesting for its connexion with sea bathing. The fashion of going to the seaside for holidays set in about the middle of the eighteenth century. Sea bathing, although not unknown before, was made popular by the propaganda of a certain Dr. Richard Russell in 1753, with the result that many people, as the old rhymester says—

"Rushed seaward to be cur'd like tongues
By dipping into brine."

Portsmouth, not to be left behind in the fashion, provided visitors "facilities for washing" in Bathing House Square. Not far from here the Hot Walls, in front of the "Saluting Battery," was a famous place for bathing and playing for many generations of old Portsmuthians.

FIG. 2.—Sally Port.

A little further east a reading room and pump room, with conveniences for bathing, was established in 1816 near the site of the Clarence Pier. This has gone, as well as the old-fashioned horse machines with a big hood over the seaward door, and the hoop-skirted "nymphs" who ducked children willy-nilly beneath the salt sea waves. Now there are corporation chalets and tents on the beach, and the Swimming Club, between the Clarence Pier and the Castle, has a good diving board; another is in use at the popular bathing site to the east of Southsea pier.

Proceeding from Bath Square to the Round Tower we shall find between the tower and Broad Street a railed-off space called Capstan Square. Here stood the apparatus for "taughtening the mightie chaine of yron" used in war time, from the days of Henry VIII till 1813, for the defence of the harbour mouth. At low tides some of the links of the chain may be seen in the shingle. The Round Tower was built early in the fifteenth century, as well as a similar one on the opposite side of the harbour mouth. Cannon were then coming into general use, and were placed on these platforms to defend the harbour. Near here, running from Broad Street, is a twisting passage that leads to the Sally Port; in the old days it was the spot for taking boat to Spithead; in Mr. Gow's picture in the Royal Exchange Nelson is represented as embarking from this spot. Access to the sea is now obtained from the King's Stairs, nearer Southsea, close to the old Victoria Pier. The Square Tower, which is here conspicuous, was once the garrison magazine. It has on its land face a bust of Charles I, set up to commemorate his safe return from his travels in search of a wife. When Lord Viscount Wimbledon was governor of Portsmouth he issued an order that all persons were to doff their hats to the King's image—an order the inhabitants treated with scorn and derision.

We are now at the bottom of High Street. Before exploring it we will go back to some of the grubby streets. But first, looking up the High Street on our left hand, we shall see two plaques on adjacent houses—one on the house of Admiral Anson and one on the birthplace of George Meredith. On the right-hand side, at the corner of Grand Parade, is the York and Pier Hotel—the old Parade Coffee House. The Coffee House was patronized by the captains of the old navy. Here in red breeches, three-cornered hats, and pigtails they sat on benches outside the house smoking their long pipes. Here in 1729 they had an "early club" which met at 4 a.m.!

Anson's house, now No. 78, High Street, must have witnessed many strange sights. During the war with Spain he was placed in command of a Pacific Squadron of six vessels and sailed from England in 1740. With one ship and less than two hundred men he returned to Spithead, on June 15th, 1744, having circumnavigated the globe in three years and nine months. He was made a Rear Admiral of the Blue. In 1747 he defeated the French off Cape Finisterre and returned to Portsmouth with six battleships and four merchant ships as prizes, valued about £300,000, and was created Baron Anson of Soberton. Amongst his prizes were *L'Invincible* and *La Gloria*, which caused the French commander to remark to Anson, "You have conquered the invincible, and the glory is yours."

Meredith was born February 12th, 1828. He attended here a private school till he was fourteen and was then sent to Germany to complete his education. Not much is known of his early life. He is said to have threatened to haunt anyone who attempted to write his biography. There is a reference to Portsmouth in *Evan Harrington*.

FIG. 3.—John Pound's House, Highbury Street.

In Oyster Street, the favourite resort of the Guernsey onion men when they visit Portsmouth, there is a small disused chapel, now utilized by the foreign egg business, in which John Wesley often preached, and on the opposite side of the way is the house in which he lodged. Another chapel in which Wesley used to preach stands at the corner of Warblington Street and Nobbs Lane. John Wesley came to Portsmouth in July, 1753. He records in his journal of the crowds that thronged to hear him—

"So civil a people I never saw before in any seaport town in England. I preached in an open part of the Common adjoining the new chapel of St. George's. The congregation was large and well behaved, not one scoffer did I see, nor one trifler."

Now we turn out of the narrow street into the broader and more picturesque Street of Saint Thomas, which is just a quarter of a mile long. In it are one or two sixteenth century houses known as "garrison houses." These were built low so that they should not overtop the fortifications or interfere with the sighting of the guns. No. 78 will interest lovers of Dickens. Here Mr. Vincent Crummles had his quarters. "Mr. Crummles lived (on mutton and onion sauce) at the house of one Bulph, a pilot, who sported a boat-green door with brass knocker, brass plate, and

brass handle." At the upper end of the street is a Baptist chapel which claims to be the oldest Nonconformist place of worship in Portsmouth. John Sicklemore preached here in 1642. Near it is Palliser House, noted for its connexion with the trial of Admiral Keppel. The house has a round bay supported on columns. Another house is plaqued, "In 1801 Sir Frederick Madden was born here."

Running across St. Thomas's Street is Highbury Street. From 1214 till quite recently it was called St. Mary's Street. On the north side of this street is a fine house, No. 8, now called Curzon House, with a plaque on its front; here lived Admiral Lord Howe, the victor of the Glorious First of June, 1794. On the south side of the street No. 78 is a little wooden house with a tiny workshop. This is the house of John Pounds, the founder of ragged schools.

Pounds was born in 1766 and was apprenticed as a shipwright in the Dockyard. Here he met with an accident which crippled him for life. He then took to cobbling and worked and lived in this little house. His brother had a deformed son whom John took great care of, and no doubt the devotion he lavished on his unfortunate nephew initiated in him the care and pity he lavished on the uncared for youngsters that ran and played about the narrow lanes and alleys round his shop. Whilst toiling in his little shop he found time to teach them the rudiments of the three R's. Too poor to buy books for his unkempt scholars, he picked advertisement bills from the walls and with scraps of newspapers made them into primers. He was very fond of birds, and often expressed the wish that he might die like one—just drop off his perch. His wish was gratified. He died suddenly on January 1st, 1839, aged 72 years. He called at the house of Mr. Edward Carter in High Street and dropped dead whilst waiting in the hall. A monument to his honour is erected in the burial ground of the Unitarian chapel in High Street.

(To be concluded.)

Nova et Vetera.

AIX EN SAVOIE.

It seems as though a spring gushing out of the earth has a fascination for even the most primitive peoples, who are apt to attribute its presence to mysterious agencies and to credit its waters with special virtues, even when they do not contain medicinal solids in solution in quantities enough to produce striking effects on the human body. When in addition the spring is hot it is likely to be still more renowned, for a copious supply of hot water obtainable without any effort or expense must have been an inestimable boon during the long ages before "Bath h. & c." became a household term. The Romans, who had long acquired the art and the means of heating large quantities of water, nevertheless seized eagerly on hot springs wherever they found them and used them for the supply of their public baths. At Bath, at Aix, at Baden, and elsewhere the remains of Thermae testify to the estimation in which such springs were held, and the ruins are evidence of the elaborate constructions of which they were the occasion.

Whatever may be the real therapeutic value of "the waters," their presence has always attracted the sick, and the flow of visitors to them may be compared to the religious pilgrimages, which even yet survive, some presenting the double attraction of the Saint and of his or her holy well.

The well known springs of Aix in Savoy are no exception to the rule, and M. Gabriel Perouse has done well in his book on the old days of Aix-les-Bains to tell the story of the rise and vicissitudes of this famous watering place.[1] He has found evidence that the Gauls or Allobroges had made use of the hot springs before the Romans came upon the scene, and the foundations of the massive constructions of the latter leave no doubt as to the importance of this bathing place. Apparently the natural heat of the waters was insufficient, for extensive remains of a hypocaust have been laid bare. Besides these the so-called Arch of Campanus, which seems to have formed part of a family mausoleum, is still standing. At Aix, as elsewhere, Roman ruins served as convenient quarries from whence to take materials for new buildings, but when and how the Roman baths were destroyed, whether suddenly or gradually from neglect, is not known, and the earliest extant written record of the springs dates from the fourteenth century. Only one ancient basin or pool now remains, which was afterwards known as the Royal Bath.

Faith in the value of the waters and desire of cure must have been strong, for down to a period so late as the eighteenth century the amenities of Aix were but slight. Bathers were carried to and from the douche in litters or Sedan chairs, there was little privacy, and the surroundings of the douches were filthy. Small wonder then if some bathers had the water brought to their rooms. Moreover, in the sixteenth century there seems to have been nothing to do in the little town in the intervals between baths, although those who were active enough could explore the picturesque environs and take boat on Lake Bourget. But the roads were execrable, and "carriage exercise" could not have been pleasant. Nevertheless, aristocratic and royal personages of both sexes patronized the waters during the fourteenth and subsequent centuries.

Early in the seventeenth century Dr. Jean-Baptiste de Cabias wrote *Les Merveilles des bains d'Aix en Savoye.* When you set out for Aix, he says, "you must leave all melancholy behind," which is easier said than done. On arrival, of course, in that age and country of clysters and purgatives, purgation is advised. His advice on diet is sensible, but the modern valetudinarian would be horrified to learn that he must get up at four in the morning (seemingly after going to bed at nine) and bathe between five and six o'clock, so as to leave the bath clear for the ladies. Above all the bather must not leave Aix before he has had a final purgation. As to lodging, it seems to have been a common custom for a number of visitors to share a room and often for two of them to share a bed.

By the middle of the eighteenth century things were better at Aix, but even then in the best inn there was only one room to serve as dining-room and sitting-room; even in that there were two beds in the corner, but as they were four-posters, with curtains, they afforded some degree of privacy. However, the majority of bathers and the most distinguished took lodgings in private houses, where their hosts were some of the most respectable residents of the town. A great step forward was taken in 1783, when the reigning Duke of Savoy authorized the erection of the first modest "Etablissement" at the sulphur spring; nevertheless, down to and after the end of the century Aix remained a small walled city of narrow lanes and thatched houses, subject to repeated conflagrations. Narrow as the streets were, they were rendered still more incommodious by the habit of keeping small dunghills before the house doors; this practice seems to have been dear to many of the inhabitants and was the subject of often vain denunciation by the authorities. Nowadays the picturesque but stinking town has vanished and most of its site is covered by the great modern bathing establishment.

All this and more may be read with pleasure in M. Perouse's book, which tells not only of the place, but of its distinguished visitors, from the eccentric J. C. Roberts—eccentric because he actually stayed a whole year in 1789/90—to the Empress Marie-Louise and Queen Hortense and her sons, of whom one, as Napoleon III, was later to annex Savoy to France. The husbands of both these ladies were then deposed and the Queen was in course of being divorced, but M. de Flahaut and the Count Neipperg, who accompanied them, were doubtless able to console them. There is a chapter on Lamartine, who with his English wife frequented Aix, and notes on the visits of Alexandre Dumas and of Balzac, who there placed one of the scenes of his *La Peau de Chagrin.*

Thus for at least 400 years, no matter who were its rulers, Dukes of Savoy and Kings of Sardinia, France, or Spain, the waters have not lost their vogue, and the treatment given at the Etablissement benefits countless invalids, even if it has to be admitted that the water of the Bain d'Alun contains no alum and that the sulphur spring is almost if not quite innocent of brimstone.

[1] *La Vie d'Autrefois à Aix-les-Bains.* Par Gabriel Perouse. Chambéry: Librairie Dardel. 1922. (5½ in. by 7½ in., pp. 348; 15 plates.)

British Medical Journal.

SATURDAY, JUNE 30TH, 1923.

HONOUR TO RONALD ROSS.

SIR RONALD ROSS's medical colleagues throughout the world will rejoice to learn that a movement is afoot to signalize the twenty-fifth anniversary of his successful transmission of malaria to the anopheline mosquito by some public recognition of the incalculable service he has rendered to the Empire and to millions living under its protection.

In a letter in the *Times* of June 22nd, signed by some of the leading men of affairs of this country, a noble tribute is paid to the world-wide importance of the knowledge acquired through Ross's patient and exacting labours and of the material benefits which have accrued therefrom to mankind. It is proposed to establish in London some permanent memorial to his achievement as a token of public gratitude while he is still with us. We believe that the appeal will meet with sympathetic and widespread support. It is one which cannot be overlooked by those whose financial interests are centred in the tropics. The suggestion is put forward that the occasion provides a fitting opportunity to establish a "Ronald Ross Clinic" for tropical diseases, in which laboratory research and clinical investigation should be combined as closely as possible. With the same ideal, clinical units for medicine, surgery, and gynaecology have recently been established at the leading London medical schools, and as His Majesty said recently, when laying the foundation stones of the new buildings at the University College Medical School, these have justified the high hopes with which they were founded in 1919.

We feel confident that the establishment of a similar unit or clinic in tropical diseases, with Sir Ronald Ross at its head, would fulfil a national purpose and give a powerful stimulus to the study of tropical medicine and parasitology, for which London has already become a centre. The clinic must have the fullest scope for the initiation and continuity of its researches, but if it is to serve more than an ephemeral purpose it must take its proper place with other institutes devoted to post-graduate study and research under the aegis of the University. It is stated that its primary object will be research, not teaching, but there must be provision for training others in research, since the permanent usefulness of the memorial is the avowed aim of the founders.

The relationship of the clinic to other bodies similarly engaged, as well as the best means of securing access to an adequate and constant supply of clinical material, will require the most careful consideration. In giving two million dollars for the building and equipment of a great School of Imperial Hygiene the Rockefeller Foundation was undoubtedly inspired by the desire to integrate the post-graduate work in preventive medicine in London, and this institute too must have its clinical laboratory for tropical diseases and be linked with the clinical wards of some accessible hospital.

Hitherto, apart from special military provision arising out of the war, the care of those suffering from tropical diseases has been undertaken in London by the corporation of the Seamen's Hospital Society. In its hospitals at the Albert Dock and in Endsleigh Gardens over a hundred beds are provided for these maladies, and this total would appear to be adequate for present needs if fully endowed and utilized. The Seamen's Hospital Society has, in the past, notably helped the cause of education in London by opening its hospitals for post-graduate clinical instruction. Its interest in the promotion of research is shown by the way in which it has provided, in the premises partly occupied by the Hospital for Tropical Diseases at Endsleigh Gardens, accommodation for the London School of Tropical Medicine, the Tropical Diseases Library, the Tropical Diseases Bureau (Colonial Office), and the Research Institute for Agricultural Helminthology (Ministry of Agriculture). We believe that the greatest possible benefit to humanity would follow the further strengthening of this fine centre of scientific activities by the association of the proposed unit with it and eventually of both with the School of Hygiene. By this plan there would be no depletion of funds for unnecessary buildings, and, while the unit would remain separate from the London School of Tropical Medicine, much duplication could be avoided by team work between the unit and the research departments of the school.

In any case, the position which the London School of Tropical Medicine has won for itself in London, since its foundation twenty-four years ago by Sir Patrick Manson, and the support which it enjoys from the people of the metropolis, cannot be ignored. The statement in the *Times* letter that, like its sister in Liverpool, the school is engaged for the most part in training young doctors for practice in the tropics, shows that the significance of the unique organization of its staff and curriculum has not been fully appreciated. The curriculum is so arranged that while the clinical instruction is given by visiting lecturers, chosen for their practical experience in the tropics, the studies in the laboratory are in the charge of whole-time professors—not one of whom, however, is occupied in this teaching for more than three periods of twenty consecutive days in the year. During the intervening time the professors, with their staffs, are engaged wholly in research and are free, when need arises, to visit the tropics for their investigations. During the past three years eight of these whole-time workers have been sent abroad by the school, two are still in the field, and two more are preparing to leave.

The relation of the proposed memorial to the clinical material now available in London, to the projected School of Hygiene, and to the research activities of the London School of Tropical Medicine are matters, we feel sure, which will invite, not in vain, the immediate attention of Mr. Asquith and the distinguished men associated with him in the laudable endeavour to honour Sir Ronald Ross.

WINDWARD ISLANDS MEDICAL SERVICE.

FROM time to time during the last two years we have had occasion to advise intending applicants for posts in the medical services of certain West Indian colonies to consider carefully the disadvantages and disabilities attendant upon the choice of that particular field of practice. We have done so in the belief that conditions so bad must surely find a remedy. It was reasonable to hope that when the inquiry urged centrally and locally by the British Medical Association had been completed the officers in those services would secure speedy and adequate redress of their grievances. The report of the Wind-

ward Islands Medical Committee, together with the recommendations of the Governor and the final ruling of the Secretary of State for the Colonies thereon, have now been communicated to the Dominions Committee of the Association, and it is clear that our confidence has been misplaced.

The recommendations of the Islands Committee failed to meet the case put forward by the British Medical Association in the first instance, for they allowed net commencing emoluments from all sources to fall short of £600 a year—the lowest sum recognized by the Association as adequate for colonial appointments. They also left untouched other local grievances. The settlement advocated by the Governor and sanctioned by the Secretary of State is worse still. Its distinguishing feature is that the medical officer in Grenada, with a consolidated salary on appointment of £400, supplemented by some £50, the net proceeds of private practice, is left to find out of his own pocket the difference between £70 forage allowance and the allowance of £120 to £180 estimated by the Islands Committee as meeting the cost of necessary expenditure on motor car or car and horse. The medical officer has to supply as well as run his car. In short, the Government of the Windward Isles, driven by economic pressure, has decided to perpetuate a state of affairs which, in our considered opinion, denies to members of its medical service conditions essential at once to the efficient exercise of their profession and to adequate provision for their dependants.

We are convinced that no practitioner fully conversant with existing conditions will apply for an appointment in the Windward Isles. This conviction alone would be sufficient justification for explaining more fully than is possible within the limits of the present article the position which has arisen, and we propose to deal with the matter in detail in future issues. In doing so we shall not forget the plight of those who, having served faithfully and with no small distinction in those islands, now see their last hope of relief vanish, and are left no alternative but to begin life afresh elsewhere, or to accept as final, conditions only tolerable whilst hope of immediate redress remained. To them we would say that if the tragedy of the Windward Islands medical services is a sorry chapter in the history of British medicine, it is one for which the profession itself has no responsibility.

BRITISH EMPIRE CANCER CAMPAIGN.

WE are informed that the Royal Society and the Medical Research Council have agreed jointly to receive delegates from the British Empire Cancer Campaign to discuss the formation of a scientific committee for the distribution of money subscribed to the campaign for research purposes and the revision of the articles of association of the campaign which may be necessary to give effective powers to the committee. Representatives of the Imperial Cancer Research Fund will be present at this conference. The first meeting of the Grand Council of the British Empire Cancer Campaign was held at the headquarters of the British Red Cross Society, London, on June 25th. The Grand Council consists of seven representatives nominated by the Imperial Cancer Research Fund, seven by the Cancer Hospital, Brompton, seven by the Middlesex Hospital, three by St. Mark's Hospital, London, and several other members who have agreed to serve. The Earl of Athlone was elected chairman of the Council. A discussion took place on the constitution of the campaign, in which the representatives of the Imperial Cancer Research Fund, the Middlesex Hospital Cancer Charity, and the Cancer Hospital pointed out the desirability, in the public interest no less than in the interests of research, of making the executive committee more representative. It was evident that these bodies viewed with some concern the articles of association of the limited liability company which the promoters had formed, and which, it was alleged, had not been disclosed to them in negotiations for their support. A small subcommittee of the Grand Council was elected to investigate these articles and to see what changes in them, if any, were desirable in order to secure the co-operation of all parties interested. It would thus seem that the Grand Council, which consists of elected representatives, means to make itself responsible for the policy to be adopted, and not merely to exist as a subsidiary body which the executive committee, provided in the articles of association as they now exist, might consult occasionally. As it has been declared that the present executive committee regards itself as provisional, and that its members are willing to give place to others who may be considered more suitable, and as the Royal Society and the Medical Research Council have agreed to discuss the position, it seems possible that an executive body representative of research may be formed. We feel sure that such a decision would meet hesitations we felt obliged to express when the campaign appeal was issued, and would receive general approval. A meeting will be held at the Mansion House on July 6th to inaugurate the campaign.

THE MANUFACTURE AND DISTRIBUTION OF INSULIN IN SCANDINAVIA.

THE Scandinavian countries, though politically independent, have a happy way of acting in unison in medical matters, and the manner in which the problem of insulin manufacture and treatment is being tackled by Professor August Krogh of Copenhagen affords a good illustration.[1] In November last Professor Krogh went to Toronto and arranged with the university authorities there for an adequate supply of insulin for the Scandinavian countries. The problem with which he was confronted was not quite simple. Remedies cannot be patented in Norway, Sweden, and Denmark, and it is thus open to any manufacturer to attempt to produce insulin and place it on the market. This procedure would, of course, be open to serious objections, and Professor Krogh has made arrangements with the Toronto authorities according to which no preparation can be sold as insulin in Scandinavia unless it has received Professor Krogh's approbation. He has approached Mr. Kongsted, the proprietor of Löven's Kemiske Fabrik, who has undertaken to manufacture insulin and to make no profit out of its sale in the Scandinavian countries. The laboratory in which insulin is to be made will be conducted as an independent institution, and the financial results will be published yearly. Only the direct costs of the manufacture, control, and distribution of insulin will be considered in fixing its price, and after the capital sum invested in the institution has been paid off—at, it is hoped, a comparatively early date—the proceeds of the sale of insulin will be devoted to further research and to the purchase of new plant. The charge provisionally fixed for every Toronto unit is 20 Danish öre, but this will be modified if and when circumstances warrant. Six clinical research workers in Norway, Sweden, and Denmark have accepted Professor Krogh's offer of a quantity of insulin, enough for one or more patients, and it is hoped that a supply may soon be available for Scandinavian hospitals; not till some time later will insulin be issued to general practitioners and their patients. This policy is adopted not only with a view to conserving the limited supply of insulin, but also on account of the dangers and difficulties

[1] *Ugeskrift for Laeger*, May 31st, 1923.

associated with its administration. In this connexion Professor Krogh urges all who wish to administer insulin to their patients to familiarize themselves with the technique of blood sugar estimations, and the method he recommends as the most simple, rapid, and accurate is that described by Dr. H. C. Hagedorn and Dr. N. Jensen.[2] Professor Krogh has had to abandon, at least for the time, his project of preparing insulin from fish, and he has secured a supply of pancreases from the Danish swine abattoirs.

VACCINE TREATMENT OF TUBERCULOSIS BY A NEW METHOD.

WE gave last week a full account (pp. 1065 and 1059) of the researches conducted by Professor Dreyer at Oxford, which have resulted in the preparation of a new form of vaccine; they have naturally attracted a great deal of attention and we are informed that the Medical Research Council has received many inquiries. Professor Dreyer has so far given most attention to the production of the vaccine for tuberculosis in its various forms, but the principle applies also to some other infectious diseases. In reply to the inquiries mentioned the Medical Research Council has issued the following statement: "When it had been shown by experiment that small animals, highly susceptible to tuberculosis, when infected with tubercle bacilli were improved or lost the signs of active disease after the use of Professor Dreyer's new antigen or vaccine, arrangements were made for trials of this treatment under suitable control at three hospitals in London. The results which have been obtained hitherto have been favourable almost without exception. Upon the results, highly promising as they now seem to be, which have been obtained in cases of tuberculosis of the lungs or of other internal organs, no final opinion can be passed until a longer period has elapsed. In cases of tuberculous disease of the glands and of the skin it can be said already that the results of this treatment have surpassed any known to have been attained regularly by other methods. Encouraging results have also been gained in the treatment of infections like those in puerperal fever and other septic conditions. There is good ground therefore for hope that a very important advance in the curative treatment of tuberculosis and of some other diseases has been made. Until these laboratory and hospital results had been achieved, publication of Professor Dreyer's method was withheld. The Medical Research Council are now arranging, in consultation with Professor Dreyer, for extensive trials of the new treatment by physicians and surgeons at various centres in different parts of the country where suitable facilities can be provided. Much has still to be learned of the best modes of application of the treatment, and it is not ready yet for general use. For the series of trials now in view supplies of the new vaccine will be prepared for distribution at the Oxford School of Pathology, from which for some years standard diagnostic serums for typhoid, paratyphoid and dysenteric infections have been distributed after preparation on behalf of the Medical Research Council. As soon as the progress of the patients under treatment has been sufficiently watched and recorded, full publication will be made of the clinical results which have been obtained. If these justify the hopes which have been formed, and lead to a wide use of the new treatment, it is believed that, by arrangements which have already been made by the Medical Research Council, adequately large supplies of the necessary antigen will be ready at very small cost. Investigations are already in progress to ascertain what useful extensions can be made of the new method of antigen preparation and of its applications to the prevention or treatment of infective disease."

[2] *Bioch. Zeitschr.*, Bd. 135, 1923, p. 46.

LAËNNEC.

THE Medical Classics Series edited by Dr. Charles Singer is designed to give extracts from the works of the men who have made great advances in the science and art of medicine. Each volume is to be accompanied by a short life and notes; the plan thus differs from the purely biographical plan of the Master of Medicine Series edited by the late Charles Louis Taylor, the gifted Assistant Editor of this JOURNAL. The first two volumes of the new series were devoted to Lord Lister and Sydenham, and are appropriately followed by one on Laënnec. It contains a translation of selected passages from the first edition of *De l'Auscultation médiate*,[1] which saw the light on August 15th, 1819. The life is short but of absorbing interest, and in its course Sir William Hale-White admirably brings out the extraordinary energy and ability of a man labouring under great difficulties, particularly the advances of the disease, chronic pulmonary tuberculosis, which he did so much to elucidate. Primarily a notable morbid anatomist, Laënnec, by a fortunate flash of his quick brain, struck out the idea of the stethoscope, and in little more than three years his epoch-making treatise appeared. That in so short a time the numerous râles, abnormal sounds, and cardiac murmurs audible in the chest should be described, classified, and correlated with morbid changes is a surprising triumph of industry directed by genius; added to this its lucid and accurate style ensures that it will always remain a classic. As Sir William Hale-White remarks, Laënnec was one of the founders of the clinical method of studying disease in relation to morbid anatomy, which, although other methods have since been elaborated, still remains the corner-stone of medicine. At first Laënnec did not consider it necessary to have a name for what he modestly spoke of as "so simple an instrument," but as others thought differently and used words sometimes barbarous and always unsuitable, such as sonometra, pectorilogue, pectoriloquie, thoracilogue, and cornet médical, he decided that, if it must be given a name, the most suitable would be stethoscope. Soon after the first edition of his book appeared the state of his health obliged him to leave Paris for Brittany, where he stayed for two years; the progress of his tuberculosis was thus stayed in some degree, and in 1821 he returned to Paris. During the next four and a half years he accomplished an almost incredible amount of work, but unfortunately was no exception to the rule that pioneers meet with opposition. In those days opposition was less mealy-mouthed than now; from the dogmatic and dominating Broussais abuse and ridicule were his portion, and his rapid success and wide reputation excited contemporary jealousy. In 1824, when 43 years of age, his marriage brought him great happiness and an optimistic view of his health. Two years later, when correcting the proofs of the second edition of his great book, he realized that he was dying, and soon after left Paris for the last time for Ploaré in Brittany, where the end came on August 13th, 1826.

BIOMETRICAL STUDIES IN TUBERCULOSIS.

IT is sometimes difficult to understand how a patient with the grave changes found at necropsy has managed to live so long; how, in other words, damage to vital organs has been compensated so that an at any rate fairly successful new functional balance of interdependent parts or organs has been effected. Dr. Raymond Pearl, of the Statistical Department of the Johns Hopkins Hospital, is applying the methods of bio-statistics to the elucidation of these adaptive regulatory powers of the organism. In the first

[1] *Translation of Selected Passages from De l'Auscultation médiate (First Edition) by R. Théophile H. Laënnec.* With a Biography by Sir William Hale-White, K.B.E., M.D. Medical Classics Series. Edited by Charles Singer, M.D., D.Litt.Oxon. London: John Bale, Sons and Danielsson, Ltd. 1923. (Crown 8vo, pp. x + 193; 10 illustrations. 12s. 6d. net.)

of these Biometrical Studies in Pathology,[1] written with Miss A. L. Bacon—on the quantitative relations of certain viscera in tuberculosis—it is assumed that the relation between the weights of any two organs reflects in some degree and manner, in a statistical sense, the functional balance existing at the time between the particular organs considered, and also reflects in its duly proportional degree the functional balance of all parts of the body taken as a whole. The aim of these investigations is to discover and describe the type and variation of the weight relations of certain important organs of the body under various normal and morbid conditions; for example, an attempt will be made to find solutions to questions such as the following: Is the ratio of liver weight to heart weight, on the average, different, and if so by how much and with what degree of variation, in a group of persons found after death to show as the primary morbid lesion pulmonary tuberculosis, from what it is in a group showing endocarditis as the primary disease? The investigation into the quantitative relations of certain viscera in tuberculosis was based on the records of 3,848 necropsies at the Johns Hopkins Hospital, of which 1,341, or approximately 35 per cent., showed tuberculous lesions of some sort, 825 being active and 516 inactive. The cases were divided into groups of whites (male and female), coloured (male and female), and then further subdivisions were made according to the character of the tuberculous change—active, pulmonary alone, pulmonary and other, glandular alone, glandular and other, and generalized tuberculosis; inactive tuberculosis. The next step was to calculate for each case six organ-weight indices, such as liver to heart, and heart to spleen. The general result is that five of the six organ-weight indices gave very different values in the case of persons dying of tuberculosis only as compared with those dying with some tuberculosis but also with other grave lesions. The question is discussed whether persons with tuberculosis only have relatively small hearts and large spleens because they had fatal tuberculosis, or whether they had fatal tuberculosis in part at least because they congenitally had relatively small hearts and large spleens. Pearl's general statistical studies of tuberculosis indicate that it acts in many ways like an organic rather than as a simple infective disease, such as typhoid fever; and in this research the evidence is in favour of the view that fatal tuberculosis lowers the absolute weight of the heart and increases that of the spleen.

[1] Raymond Pearl and Agnes Latimer Bacon: Biometrical Studies in Pathology. I, The Quantitative Relations of Certain Viscera in Tuberculosis. *The Johns Hopkins Hospital Reports*, vol. xxi, Fasciculus iii; pp. 157-230. 1.50 dollars.

THE MEDAL OF THE WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

THE annual dinner of the West London Medico-Chirurgical Society was held at the Café Monico on June 19th, with the President, Dr. Alfred George Wells, in the chair. There was a large attendance of members and guests and a considerable toast list had been drawn up. The loyal toasts were followed by that of the Imperial Forces, proposed by Dr. J. Burnford and responded to by Surgeon Vice-Admiral Sir Robert Hill, Medical Director-General, R.N., Brevet Colonel J. W. West, R.A.M.C., and Air Commodore David Munro, Director R.A.F. Medical Service. The toast of prosperity to the West London Medico-Chirurgical Society was proposed by Sir Arbuthnot Lane, who in complimenting the Society on its fame and its vigour remarked on the need for combination between post-graduate institutions if London were to take its proper place as the great centre of medical graduate teaching. The President in his reply touched briefly on the year's work, and pointed to the satisfactory state of the Society's membership, now nearly 500. Mr. Dan Mason, a vice-president of the West London Hospital, added a few words on behalf of the associated institution. The President then handed to the guest of the evening—Sir Clifford Allbutt—the Society's Triennial Gold Medal, amidst warm applause, everyone present standing throughout the presentation. The medallist, being called upon to respond, modestly disclaimed his title to this honour, greatly as he appreciated it. He supposed, however, that it might be that his professional brethren had come to look upon him, in the Bismarckian phrase, as an "honest broker" in the mart of medical ideas and discoveries, acting as a merchant between producer and consumer. The marvels of the present age of medicine, Sir Clifford said, impressed him deeply. New conceptions and achievements were leading to a greater power over disease; but what would happen to the medical student of the future, with so much to learn, he dared not imagine. Looking back on a very long professional life he could not but regret the passing away of the old style general practitioner, whose accomplishments and devices and instinctive skill used to fill him with wonder; in the flights of scientific medicine there was some risk of neglecting the craftsmanship of such bygone practitioners. Lastly, Sir Clifford Allbutt said that to receive at the close of his career such compliments as the Moxon Medal of the Royal College of Physicians, the Gold Medal of Merit of the British Medical Association, and now the West London Medal, was to him peculiarly touching. The health of the Cavendish Lecturer, Dr. Henry Head, was proposed in very cordial and appreciative words by his friend, Sir Humphry Rolleston, President of the Royal College of Physicians, and Dr. Head replied in characteristically happy phrases. The toast of kindred societies and guests, proposed by Dr. Seymour Taylor, Consulting Physician to the West London Hospital, was responded to by Sir Bruce Bruce-Porter, President of the Hunterian Society, and Sir Crisp English, President of the Harveian Society. The evening's entertainment closed with the toast of the President's health, proposed by Sir William Hale-White, President of the Royal Society of Medicine, and a brief reply by Dr. Wells.

THE RESEARCH DEFENCE SOCIETY.

AN uneventful year, the fifteenth in its history, was reported by the Research Defence Society at its annual meeting on June 20th. Viscount Knutsford presided and moved the adoption of the annual report, which showed that the Society had had a considerable accession to its membership; more than 450 new members had joined during the past few months. The lectures and debates had been fairly satisfactory in numbers and very satisfactory in results dealing with antivivisectionist misstatements. The Dublin Branch had decided that in view of the separate government of Southern Ireland, it ought to have no official connexion with the parent society, and accordingly it had been dissolved and a new association was being formed in the Free State capital. The parliamentary secretaryship of the Society had been vacated by Dr. Elliot, M.P., on his appointment as Under Secretary of Health for Scotland, and Sir Sydney Russell-Wells, M.P., had accepted the position in his stead. Sir David Ferrier presented the financial statement, which revealed an income of £806 and an expenditure of £948. He said, however, that this apparently none too prosperous state of affairs did not represent the actual position of the Society's finances at the moment, because, as the result of an appeal by Lord Knutsford, since the close of the Society's year there had been a considerable increase in subscriptions and donations. The remainder of the annual meeting was occupied by a lantern lecture by Dr. C. W. Saleeby, describing the work done in recent years on heliotherapy

in England, Denmark, Switzerland, and the United States. He mentioned that the credit for the discovery, or at least the anticipation, of the healing virtues of light in rickets belonged to an English medical man, Dr. Theobald Palm, who was still in practice at Aylesford in Kent. More than thirty years ago, when Dr. Palm was medical officer at a mission hospital in the Far East, he found that rickets appeared to be present when there was darkness and absent when there was sunlight, though he had no technical equipment with which to prosecute any researches. Afterwards came the experiments of Finsen of Copenhagen, in combating lupus by light treatment. In Switzerland evidence had been forthcoming that the action of sunlight, as yet largely unexplained, upon or through the skin might cure disease, notably tuberculosis. He spoke particularly of the wonderful results obtained by Dr. Rollier's method of treating tuberculosis at his solarium at Leysin in Switzerland, and Sir Henry Gauvain's work at Alton. Recently he had had the opportunity in New York of seeing some experimental work on animals, which went to show that the useful therapeutic agency in the sun's beam was the light and not the heat. Results improved with the exclusion of heat rays. The amount of phosphorus and lime in the blood of these experimental animals had been found to vary according to the light in the sky at the time of the year; it was highest in June, and gradually dropped, reaching its lowest point in March. Clothing had an important effect upon the exclusion of light from the body; mercerized white cotton would allow the light to act upon the skin almost as well as if the skin were naked, whereas the same material coloured black arrested the potent rays in their passage. He believed that in a few years' time exposure to an adequate amount of sunlight would be regarded as part of the régime of pregnancy.

MEDICAL FELLOWSHIPS IN THE UNITED STATES.

THE Rockefeller Foundation, New York, has entrusted the Medical Research Council with a fund to be used in providing fellowships in medicine in the United States. Fellowships will be awarded by the Council, in accordance with the desire of the Foundation, to graduates who have had some training in research work in the primary sciences of medicine or in clinical medicine or surgery and are likely to profit by a period of work at a university or other chosen centre in the United States before taking up positions for higher teaching or research in the United Kingdom. A fellowship will be of the value of not less than £315 a year for a single fellow, or £470 for a married fellow, payable monthly in advance. Travelling expenses and some other allowances will be made in addition. A fellowship will be tenable for one year, which will as a rule begin in September. Applications for fellowships tenable for the academic year 1923-24 should be made not later than July 20th next. Full particulars and forms of application are obtainable from the Secretary, Medical Research Council, 15, York Buildings, Adelphi, London, W.C.2. It is understood that similar medical fellowships provided by the Rockefeller Foundation will be awarded by the National Research Council at Washington to American graduates desiring to work for a time at selected centres of research work in this country. Both announcements are of great interest. It is of course a commonplace to say that science is international and knows no boundaries; but the practical application of the principle frequently encounters difficulties, to the detriment of progress. Some of these difficulties are removed when scientific workers know those of other countries and their methods of work. The United States now possesses many first-rate laboratories and research institutes, and it will be a great advantage to the British fellows to work in them.

THE NATIONAL PHYSICAL LABORATORY.

THE annual inspection of the National Physical Laboratory on June 26th was attended by a very large number of visitors, who were received in the Aerodynamics Building by Sir Charles Sherrington, President of the Royal Society and Chairman of the General Board of the Laboratory, Sir Arthur Schuster, F.R.S., and the Director, Sir Joseph E. Petavel, F.R.S. The first impression of the uninstructed visitor after he has observed the amenity of the place, which is at the gates of Bushy Park, is the bigness of the area already occupied but to be extended, and the second the multiplicity of the laboratories and testing rooms and the astonishing complexity of the researches and measurements conducted in them. Broadly speaking, the work of the laboratory falls into two classes. On the one hand, the staff is engaged in research into a great variety of scientific questions, and every year makes numerous contributions to the progress of many departments of science; on the other hand, it renders another kind of service to all these departments of science by its verification of the exactness of instruments of research. To take an example having a direct interest to medicine we may mention the testing of thermometers, including clinical thermometers, which is carried out systematically on a very large scale. The tests are made with great precision, and the method appears to leave no loophole for errors. In the Radiology Division work has been continued on the crystalline structure of metallic crystals by means of the *x*-ray spectrometer. The high voltage *x*-ray equipment has been employed on the examination of a number of samples of metal, and much thicker specimens have been radiographed than was previously possible. This work has necessitated the *x*-ray equipment being sufficiently protected, and to this end the box containing the *x*-ray tube is covered on all sides with sheet lead 6 mm. in thickness. The measurement of the protective value of materials used in *x*-ray installations has provided a considerable amount of work for the department during the course of the year, while in addition a number of hospitals have been inspected and reported upon along the lines of the recommendations of the *X*-Ray and Radium Protection Committee. In many cases the protection afforded to the operators was found to be defective, and in the reports on these inspections satisfactory means of remedying the various defects have been pointed out. The Metrology Department is concerned, among other matters, with the maintenance of standards used for the verification of sets of weights for scientific purposes, and a new weight made of stellite was shown; the material is found to be particularly stable, and, being extremely hard, is resistant to accidental damage. An instance of the astonishing minuteness to which the art of measurement is carried is afforded by two pieces of apparatus designed and made in this department; both are capable of measuring with accuracy to a millionth part of an inch. Some idea of what a millionth part of an inch is may be gained from the statement that in the thickness of a single cigarette paper there are as many millionths of an inch as there are cigarette papers in an inch. We cannot pretend to give any full account of all that the laboratory is doing, and will conclude by a brief reference to the Aerodynamics Department, which is now adequately housed. Among other appliances is a wind-tunnel in which a gale of over fifty miles an hour can be produced and the behaviour of model aeroplanes studied.

THE ORTHOPAEDIC HOSPITAL.

PRINCE HENRY, President of the Hospital, laid the foundation stone of the Nurses' Home which is to be built for the country branch of the Royal National Orthopaedic

Hospital at Brockley Hill on Saturday last. A brief dedicatory religious service was conducted by the Rev. Stewart F. L. Bernays, after which the Prince laid the stone, assisted by the architect, Mr. R. M. Pigott, A.R.I.B.A., and the contractor, Mr. Roland Holloway. Lord Denbigh, the chairman of the Committee of the Hospital, then thanked the Prince for attending and emphasized the necessity of finding out and treating cripples in the earliest possible stage, which the long waiting list of cases showed was not yet possible. Prince Henry in his reply reminded his hearers of the history of the Hospital, and quoted statistics to show the large number of cases which urgently needed treatment and the necessity of expansion to ensure that surgical tuberculosis should receive the most modern treatment of sunlight and fresh air while at the same time providing facilities for surgical operations in those cases in which they were necessary. The country branch, which already has nearly a hundred beds, including a large hut for open-air treatment, the gift of Queen Mary's Convalescent Auxiliary Hospitals, stands in twenty-seven acres of ground at Stanmore on the top of the Elstree ridge over 400 feet above the sea, commanding extensive views in almost every direction. It is therefore not surprising to find that the Romans, with their unerring judgement in the selection of sites, established here the station of Sullionaceae, a stage on the great road to Chester and beyond. "Perierunt etiam ruinae!" and the surroundings are now so rural that it is difficult to believe that the tenth milestone from the Marble Arch is close at hand. Prince Henry also reminded his hearers that the work is expensive and that the upkeep of the country branch, where happy and unclothed children bask in the summer sunshine, costs the charity £8,000 a year, besides the expenditure in Great Portland Street, and that the Nurses' Home will cost over £8,000 in capital expenditure. He therefore asked for liberal contributions to the funds of the charity, since the needs of London were not nearly met by the existing cripples' hospitals and expansion to at least four hundred beds must be provided at Brockley Hill in the near future.

THE tenure of office as Lord Rector of Edinburgh University by Mr. D. Lloyd George ends in September, and the University Unionist Association has invited Mr. Baldwin to be its candidate at the forthcoming Rectorial election. The Liberals have nominated Sir John Simon, and a Labour group in the University has adopted Mr. Bertrand Russell as its candidate.

THE attention of members of the Association who propose motoring to Portsmouth to attend the Annual Meeting of the British Medical Association is called to the fact that garage facilities are very limited. Those members who require accommodation reserved for them must notify Dr. W. P. McEldowney, "Elmhurst," London Road, North End, Portsmouth, on or before July 6th.

DR. JAMES MOORES BALL, of St. Louis, U.S.A., has presented his collection of ophthalmic specimens to the Army Medical Museum, Washington. The museum was rich in specimens illustrative of other branches of surgery, but was poor in eye specimens. The collection includes a large number of original drawings of external ocular disease, photographs, pathological preparations of eye diseases, microscopical sections, eye instruments, rare ophthalmic literature, copies of well known ophthalmic atlases, and many portraits of bygone leaders in ophthalmic work. The drawings and pathological specimens have already been installed in the museum. Correspondents have been instituted in other cities and countries so that exchanges and additions may be secured; amongst these are Mr. Treacher Collins of London and Mr. Gray Clegg of Manchester.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

HONORARY FELLOWSHIP.

AT a meeting of the Royal College of Surgeons in Ireland on Monday, June 25th, Sir Harold Stiles, K.B.E., Regius Professor of Clinical Surgery in the University of Edinburgh, was admitted an Honorary Fellow. After the termination of the ceremony of enrolment the President, Sir William de Courcy Wheeler, addressed Sir Harold Stiles as follows:

Sir Harold Stiles,—It devolves on me now, in conformity with the unanimous wish of the Council of this College, to admit you an Honorary Fellow. We recognize that your original contributions to surgery have been signal and outstanding, and we follow with pride in the footsteps of the many great medical schools which have done you honour. The parchment which I will now ask His Excellency to hand you signifies that your name will be placed on the Roll of our Honorary Fellows, in company with many great scientists, including John Hunter, Lister, and Pasteur.

The presentation was then made by the Governor-General of the Irish Free State.

CHARTER DAY DINNER.

In the evening the charter day dinner was held under the chairmanship of Sir William Wheeler. Among the guests were H.E. the Governor-General of the Irish Free State, the Lord Chief Justice of Ireland, the Recorder of Dublin, the Master of the Rolls, Mr. Justice Samuels, the Presidents of the Royal Institute of Architects, the Incorporated Law Society of Ireland, the Chamber of Commerce, of University College, Dublin, of the Royal Academy of Medicine, and of the Royal College of Physicians, the Archbishop of Dublin, the Provost of Trinity College, the Governor, Apothecaries' Hall, Dublin, the Chairman of the Institute of Journalists, the Registrar of the Royal College of Physicians, the Very Rev. Father T. Finlay, S.J., Sir T. Grattan Esmonde, Mr. G. J. Swift MacNeill, and the Master of the Rotunda Hospital (Dr. Gibbon Fitzgibbon).

Among the Fellows of the College present were the Vice-President (Mr. R. Charles B. Maunsell), Sir Lambert H. Ormsby, Sir C. Arthur K. Ball, Mr. A. Fullerton, Senator Gogarty, Dr. M. R. J. Hayes, Professor G. Jameson Johnston, Sir Thomas Myles, Professor Rowlette, Mr. J. B. Story, and Sir Robert H. Woods.

After dinner Sir WILLIAM WHEELER proposed the toast of the Governor-General and prosperity to Ireland. One of the reasons, he said, which had decided the College to revive, after an interval of some years, the charter day dinner was to have another opportunity of expressing the hope that His Excellency's tenure of office might be long and prosperous and marked by the establishment of peace and fraternity between all members of the community. The College was an institution which knew nothing of politics or sectarian strife; its impartiality had indeed been tested, for its building had within the last few years been occupied or besieged at different times by three separate military forces hostile to one another. Since the College was chartered by George III on March 9th, 1784, it had sought to promote surgical progress. The charter stated that the College was founded to improve the profession of surgery, and so to promote the welfare of the nation at large. The College and its Fellows gloried in the fact that Irishmen, north and south of the Boyne and overseas, had the welfare of the College at heart, but the salvation of a medical school was the fundamental truth that medicine and surgery, and for that matter, scholarship generally, were without nationality and knew no distinction of race or speech. Many of those present recognized in the Governor-General an old acquaintance, for as expert witnesses they had come under his hands, yet whatever happened to a witness Mr. Healy always brought his well known courtesy and kindness into play, and members of the medical profession left the courts with feelings unwounded and with pride unhurt.

Sir William Wheeler gave the toast of the Honorary Fellows of the College, coupled with the names of Dr. William Mayo and Sir Harold Stiles. Both, he said, through their writings, their disciples, and their followers, had become the daily friends of the entire community, and both were known personally to many of those present. Only the names of those who were in the very forefront of the profession were even suggested for the honorary fellowship, but when the time came to enrol Dr. William Mayo, in company with several other of his distinguished countrymen, there was not a dissentient voice. Like many pilgrims from other lands, the speaker had visited Rochester; some evidence of the position the Mayo Clinic had achieved was afforded by the fact that though the population of the town was about 8,000, in the previous year 60,000 patients, drawn from all over the globe, had sought advice and the help from Dr. Mayo and his 200 assistants. In that clinic, as in the surgical clinics of France, Germany, and Switzerland, the work of Sir Harold Stiles, as a scientific surgeon, was well known, and he was everywhere regarded also with feelings of affection. Sir William Wheeler then referred to the high tribute paid by Dr. Mayo and the late Professor Osler on more than one occasion to the general practitioner. They had referred to him as being a daily benediction in the community, living a life of self-denial and tender sympathy. The general practitioners in Ireland had lived up to the high reputation attributed to them; they had carried out their duties under conditions which would almost make those trained in the profession of arms shrink and retreat. It was no light matter to travel over roads strewn with mines; it was not a joy ride going through ambushes and of necessity by forbidden routes, to be mistaken for combatants and fired upon by friends and foes. Some fell wounded; some were killed; others escaped with their cars blown up, but there was never an instance of refusal to attend a patient when the summons was received. In conclusion Sir William Wheeler said that broadcasting was the order of the hour, but the fame of Mayo and Stiles had been broadcasted before the invention of Marconi of a mechanical plant. He asked his audience to tune their glasses and listen in for Rochester and Edinburgh.

Dr. MAYO, in reply, said that when it became known that Mr. Timothy Healy had accepted the position of Governor-General of the Irish Free State it was felt that the troubles between Great Britain and America were over. Speaking of men of Irish birth who had won distinction in America he mentioned the late Dr. John B. Murphy, and described him as the greatest surgeon of his day. The American College of Surgeons, which had been patterned upon the Royal Colleges of Surgeons of Ireland, England, and Scotland, was putting up in his memory a new building to cost about £100,000 in addition to the endowment.

Sir HAROLD STILES, who followed, said that he felt that the honorary fellowship conferred on him was a recognition, not so much of what he had been able to do in the science of surgery and in its practice and teaching, as a tribute to the College to which he belonged and the School of Surgery in which he had the honour to work. He was glad that the Governor-General had honoured the gathering with his presence, because it was an indication of his sympathy for learning and for the science of medicine.

The toast of the sister College and the guests was given by Sir THOMAS MYLES, and acknowledged by Dr. M. F. COX, President of the Royal College of Physicians, the Provost of Trinity College, and the Lord Chief Justice. The last-named said that he was greatly struck by what Sir William Wheeler had said about general medical practitioners. During the last ten years Ireland had lived through difficult and dangerous times, and the one abiding admiration he had was for the general medical practitioner; in every county he had seen him responding with the greatest courage to the test he had to pass through, always performing his duty and never shirking it or even thinking of the danger.

The toast of the President, proposed by the Governor-General, was warmly honoured.

CONFERENCE ON INDUSTRIAL HYGIENE.

UNDER the auspices of the League of Nations Union a Conference on the International Labour Organization and Industrial Hygiene was held at the Royal Sanitary Institute, London, on June 19th and 20th.

After a few introductory remarks from the Chairman, Mr. W. L. Hichens, of Messrs. Cammell, Laird and Co., Mr. Grimshaw, of the International Labour Office, Geneva, gave a short and explicit statement of the constitution and aims of the office, and remarked that it was entirely a non-political body. Upon it were represented the various States which were members of the League, also representatives of employers and workers. Following him, the Right Hon. J. H. Thomas, M.P., general secretary of the National Union of Railwaymen, remarked that the war had not only created an abnormal condition of society, but also an abnormal state of the human mind. He dealt with safety and protection in industry, and showed in a well balanced and temperate speech how the introduction of "safety" measures had been followed by a considerable reduction in the number of accidents. There were still, however, far too many accidents among railwaymen. He thought the cases were few where it could be said that employers were not interested in the health and safety of the workmen. He pleaded for more frequent meetings of the masters and men to discuss problems concerning industry and health. Lieut.-Colonel J. A. A. Pickard, general secretary, British Industrial "Safety First" Association, alluded to frequent labour "turnover" as a cause of accident, and pressed the point that prevention was better than compensation. Experience showed that in factories only a small number of accidents was due to machinery, not more than 5 per cent., also that while the larger number was due to hand labour, many of these could not have been prevented. Alluding to minor accidents, he had found in an inquiry into 60 fatalities in coal miners that 10 of the deaths were caused by sepsis owing to minor injuries not receiving immediate and proper treatment shortly after their occurrence. Compared with these the serious cases in a London firm had fallen from 17.7 per cent. to 2.5 per cent. by immediate treatment. Mr. G. Stevenson Taylor, H.M. Senior Engineering Inspector, Home Office, read a paper on the safeguarding of machinery; he pleaded that engineers should receive instruction in regard to safety devices, and urged the desirability for united action among the nations. Mr. Bellhouse, who occupied the chair, lent the weight of his position in the Home Office to what had been said by the reader of the paper, and commented upon the fact that over two-thirds of the accidents occurring in factories were not the result of machinery.

Fatigue in Industry.

After a few remarks from the Chairman, Mr. W. Graham, M.P., chairman, Industrial Fatigue Research Board, Mr. D. R. Wilson, secretary of this Board, in referring to the subject, preferred to use the words "physical unfitness or inefficiency" instead of "fatigue." Long hours were followed by smaller production. Quite apart from fatigue as a cause of accidents in factories, there was a "personal susceptibility" which could not be altogether ignored. He could not say how many countries were studying the question in the manner it was being done in the United States of America, in France, and Great Britain. An extremely interesting address was given by Dr. C. S. Myers, director of the National Institute of Industrial Psychology, in which he dealt with the muscular and nervous causes of fatigue. He reminded the audience that during muscular contraction it was not so much muscular substance itself which disappeared as the reserve of carbohydrate contained therein. The muscles of the body were always more or less in a state of contraction or "tone," and yet there was no sense of fatigue, nor were nerve fibres readily fatigued: it was the brain cells which came under the harmful influences of the waste products of the body. Fatigue was a large question and it was not really known what fatigue was. So far as industrial fatigue was concerned it could only be known by its results, for there was no real test for it. The objection to "Taylorism" was that it concerned itself too much with the wages of the men and their output, and that the men who adopted it had simply to follow their leaders. Professor

Cullis said that she would like to see more laboratory tests carried out in regard to women's work as compared with men's. She had given attention to the physiology of normal womanhood and of normal pregnancy; also to the subject of the elimination of carbon dioxide as a measure of muscular work. It made all the difference whether a woman's heart was in her work or not: if the work was agreeable to her the output was increased. Dr. Legge, of Columbia, U.S.A., expressed himself as doubtful as to the practicability of several of the tests suggested, since they could not be carried out in factories. Miss E. H. Howse, Postal Workers' Union, vividly exposed the hardships imposed upon girls employed in the telephone department of the Post Office. In twelve seconds calls had to be linked up. Some of the girls when at work were on their feet practically all the shift in front of a switchboard 3 feet high and 4 feet wide. By the end of four to eight years many of these girls were played out. In the United States of America girls gave up the work after three years, and in Australia no women were employed after the age of 28. Mrs. MacFadyn, South Africa, referred to a series of minor illnesses among the coloured men working in the gold mines in South Africa, where the malady was traced to overcooking of the food and which disappeared on giving the men oranges. She alluded to child labour in the United States of America, where children of 5 and 6 years of age were working in the cotton mills for twelve hours a day while the children of the negro population were attending school. Sir Thomas Oliver paid a compliment to the reader of the paper, and enlarged upon some of the views expressed by various speakers. In regard to the excessive demands upon telephonists, he raised the point as to whether the application of science had in this instance at least not outstripped human physical capacity to cope with it. Dr. Bond, from the chair, thanked the readers of the papers and speakers, and remarked upon the interest which the discussion had aroused.

Industrial Diseases and Injurious Processes.

Dr. T. M. Legge, Home Office, paid a well deserved compliment to the certifying factory surgeons, and stated that he was opposed to the separation of industrial medicine from general medicine. It was extremely important to know more of the incidence of industrial diseases in the early stages. It was difficult to draw out a list of unhealthy trades. He did not think that the rarer toxaemias arising in industrial occupations were of little importance. He quoted the serious conditions of health which had occurred in submarines and which were traced to arseniuretted hydrogen gas; he also alluded to the nervous symptoms produced by manganese and which had been wrongfully attributed to carbon monoxide gas. He welcomed the work which the International Labour Office was doing, and paid a compliment to Dr. Carozzi, one of its scientific advisers.

Professor E. L. Collis spoke of miners' nystagmus and its supposed relationship to carbon monoxide, also of the large number of accidents which had occurred among agriculturists. It had been stated that the number of cases of miners' nystagmus had been increasing in this country, but on inquiry in Belgium and France the increase was more apparent than real. He drew attention to such maladies as miners' beat hand, knee, and elbow, a well known form of bursitis, as being unknown to the Central Office in Geneva. Dr. Collis subsequently dealt with the provision of baths at the pit head. Dr. T. M. Watts, M.P., who occupied the chair, mentioned that nothing had been done to put a stop to the dangerous practice and consequences of "shuttle kissing." Sir Thomas Oliver supported Dr. T. M. Legge as to the inadvisability of separating the two branches—general and industrial medicine. As regards a list of dangerous occupations, distinction had to be drawn between diseases caused by the trade itself—for example, plumbism, due to the action of lead upon the body—and diseases incidental to employment. It was a well known fact that tuberculosis and cancer were more prevalent in some occupations than in others. Sir Thomas Oliver pleaded that while information in regard to occupation and disease was being gathered at the Central Office, to be turned to good account afterwards, the working classes, especially those engaged in dangerous trades, should receive instruction as to the dangers to be averted in their particular calling.

The subject of women workers' health was introduced from the chair by Miss Margaret Bondfield, and elaborated at length by Miss Constance Smith, H.M. Deputy Chief Inspector of Factories, who maintained that women's labour still required protection as regards the limitation of hours, also no night work and no Sunday labour. It was also necessary that in dangerous trades women should be protected, since women were more susceptible to some poisons than men. There was the question to be considered of the influence of these upon motherhood. The introduction of national insurance had made it easier to control women working after their confinement. The lifting and shifting of heavy weights were also dealt with. Miss Gertrude Tuckwell, who followed, said that any laws which were introduced must, to be effective, meet the needs of the workers and have their sympathy. The session was brought to a close by Mr. E. L. Poulton, vice-chairman of the General Council of the Trades Union Congress, who stated that the International Labour Office was an outcome of the war, and that its function was to accumulate information which could form the basis of consideration at future congresses of the League.

The promoters of the Conference are to be congratulated upon having brought together men and women in this country who are interested in the medical and social problems arising out of industrial conditions, and which have been, and are still likely to be, discussed by industrial conferences of the League of Nations.

Medical Notes in Parliament.

[FROM OUR PARLIAMENTARY CORRESPONDENT.]

Small-pox in Gloucester.—Mr. Leach asked, on June 25th, what was the evidence that the epidemic which had occurred in the city of Gloucester was really an epidemic of small-pox, seeing that, although it was estimated that 2,000 cases of the disorder had occurred, there had been a complete absence of invalidity or injury during the attack, an absence of any invalidity subsequent to the attack, and that the mortality had been *nil*. The Minister of Health replied that the epidemic in Gloucester had been recognized to be small-pox by a large number of local medical men, by officers of the Ministry, and by Dr. Cameron of the Metropolitan Asylums Board, who was called in as an expert by the corporation. A number of cases of small-pox were recognized in other districts and traced to Gloucester. The statements as to the absence of injury or invalidity either during or subsequent to the attacks were not correct, as he was informed that although the type of the disease was mild and no deaths had yet occurred, many of the patients had been seriously ill. The action of the Ministry of Health had led to the localization and control of an outbreak which had already begun to spread to other parts of the country, and which, if unchecked, might have caused widespread disturbance of trade as well as danger to the public health. On June 26th Sir Arthur Holbrook asked the Minister of Health whether he would consider the repeal of Section I (1) of the Vaccination Act, 1907, exempting persons conscientiously believing that vaccination would be prejudicial to the health of the child. Lord Eustace Percy replied that the Government could not undertake to introduce legislation for the amendment of the Vaccination Acts during the present session.

Infant Mortality.—Mr. Chamberlain, at the instance of Mr. Lansbury, on June 21st, presented to the House a table showing infant mortality in London, Manchester, Birmingham, and Leeds in the years 1913, 1917, and 1922, and also the figures for each of the metropolitan boroughs. In London as a whole the deaths of children under 2 years of age in 1913 gave a rate of 136 per 1,000 births; in 1917 it was 143, and in 1922 it was 109. In Manchester the figures were respectively 169, 148, and 133. In Birmingham they were 164, 130, and 112. In Leeds they were 174, 188, and 131.

London Housing By-laws (Public Health).—On report on the Housing Bill, on June 20th, Dr. F. E. Fremantle proposed a new clause. The object is to make the London County Council the sole by-law making authority for London for the taking of precautions in respect of any infectious disease in working-class houses which are divided into separate tenements. The metropolitan boroughs will still have the powers and duties of enforcing the by-laws. Dr. Fremantle explained that the by-laws might be varied either in accordance with the wishes of different metropolitan boroughs for their respective areas or in respect of limitations as to rental, or in the case of the owner-occupier living in the house. But it was hoped that the County Council would vary the conditions as little as possible because it was for the general benefit to get a set of by-laws for London as uniform as possible. The clause was the subject of agreement between the County Council and the borough councils; and it was passed.

Venereal Disease.—Sir W. Davison asked, on June 20th, whether any notification had been given on the lines of the report of Lord Trevethin's Committee that chemists were entitled to sell disinfectants, or would legislation be necessary? Mr. Chamberlain

replied that no notification had been issued to chemists in consequence of the report. He was now inquiring into the question whether legislation would be required. Mr. Chamberlain's original answer to the question on this part of the report was given in the BRITISH MEDICAL JOURNAL of June 23rd (p. 1071).

Hospitals and Legacy Duty.—As promised while the Finance Bill was in Committee, Sir William Joynson-Hicks (Financial Secretary to the Treasury) received, on June 26th, a deputation to urge that legacies to hospitals should be exempted from legacy and succession duty by the present Finance Bill. Dr. Macnamara introduced the deputation, which included a number of members of both Houses of Parliament, and representatives of King Edward's Hospital Fund and the British Hospitals Association. It was stated that the concession might amount to between £40,000 and £70,000 a year for London, and possibly another £80,000 for the provinces. Such a form of indirect assistance would be particularly helpful, inasmuch as it should encourage testamentary gifts. Sir William Joynson-Hicks made a sympathetic reply, and promised to report to the Prime Minister what had been said.

Ministry of Health: Medical Staff.—Answering Mr. Becker, on June 20th, Mr. Chamberlain stated that fifty-four medical men were employed in the work of the regional staff of the Ministry of Health on a sessional basis. There would be no economy by placing any of them on the salaried staff. Three medical officers of the Ministry of Health were in receipt of retired pay; two of these were established civil servants, and the unestablished officer possessed special qualifications.

Deaths from Silicosis.—Lieut.-Colonel Lane-Fox (Secretary for Mines) informed Mr. Hurd, on June 20th, that it was not established with certainty that silicosis was the cause of death in the case of a miner at Newbury Colony in Somerset which had been investigated. But the departmental Health Advisory Committee, after examining the dust from the mine, was of opinion that there might be some danger from gritty particles. The owners, at the request of the inspector, had installed drills fitted with a spraying device, and these were now in use. The whole question was now under careful consideration.

Miners' Cramp.—Lieut.-Colonel Lane-Fox informed Mr. A. J. Bennett, on June 13th, that his attention had been called to the proposed remedy for miners' cramp. Professor Moss was working in close collaboration with the committee on the control of atmospheric conditions in deep and hot mines, which was one of the research committees now attached to the Safety in Mines Research Board of the Department.

Registration of Nurses.—Mr. Mitchell inquired, on June 20th, whether the Minister of Health was aware of the serious position in which the smaller hospitals had been placed in consequence of the Regulations of the General Nursing Council regarding the training of nurses, which had increased the difficulty of obtaining probationers. Mr. Chamberlain said he had not received representation in this sense. It was open to any hospital which was refused approval by the General Nursing Council to appeal to him, and no such appeal had been made. In reply to Dr. Chapple, Mr. Chamberlain said that 947 applicants had been rejected by the General Nursing Council as ineligible for registration under the rules hitherto enforced. He was advised that these rules were not inconsistent with the provisions of the Act of 1919. It rested with the Council to determine what steps should be taken to advise the nursing profession of the decision of the House, but in view of the publicity given to the subject in the papers he doubted whether many nurses were unaware of the effect of last year's vote. He agreed with Sir Henry Craik that the decision of the House did not have effect until an Order pursuant to it was issued. The best course for the 900 nurses who had already been rejected would be to put in fresh applications.

Universities of Oxford and Cambridge Bill.—This measure, which had been introduced in the House of Lords, was read a second time without division in the Commons on June 22nd. Mr. E. Wood (Minister of Education) explained that it was substantially in the same form in which it was presented last year by Mr. Fisher, and was consequential on the report of the Royal Commission over which Mr. Asquith presided. It was held that the establishment of a pension scheme would be outside the scope of the Commissioners' recommendations; the universities and colleges had power to make such a scheme, and the University of Cambridge had already formed one. During the time that the Royal Commission was sitting the Treasury gave assistance to the universities to the extent of some £30,000. Mr. Asquith and his colleagues recommended that an additional £70,000 a year should be given to each university, and that sums should be allowed to the women's colleges for a period of years and for extra-mural teaching. In addition a capital sum was suggested to put the finances of the universities in better condition. The times were somewhat changed since the Royal Commission reported and it was not likely that the Government could give the full measure of assistance recommended, but it would give such assistance to the universities as would be sufficient to meet the more pressing and immediate needs. Mr. Asquith, supporting the bill, touched on the inadequacies of the salaries of university teachers and administrators. Mr. William Graham, who was a Labour member of the Commission, deplored the practical starvation of important departments of research which had a most immediate bearing on economic and industrial problems. He thought a strong effort should be made to obtain £100,000 or more in each case at the earliest possible moment.

Answers in Brief.

The number of deaths attributed to pregnancy and childbearing in 1922 was 2,971. In the same year the number of deaths associated with childbirth but attributed to other causes was 1,051.

England and Wales.

THE WELSH NATIONAL MEMORIAL ASSOCIATION.

THE Welsh National Memorial Association is one of the best examples of the good that may be done by a wise benefaction well administered. The association owes its existence to Mr. David Davies, M.P., and its prosperity very largely to his continued interest and support. It has established country sanatoriums for pulmonary tuberculosis in several parts of Wales, and has for some time had a surgical tuberculosis hospital at Glan Ely, near Cardiff, where children suffering from joint and gland affections are received and treated. It has now established a large children's hospital at St. Bride's Castle, St. Bride's Bay, to which children from Glan Ely can be transferred, thus ensuring the continuity of treatment during the prolonged period necessary for the cure of joint disease. The new institution is known as the Kensington Hospital because the castle was until recently occupied by Lord Kensington. It has been converted into an orthopaedic hospital with 101 beds. It contains on the ground floor two wards of eight beds each, one ward of seven beds, and two wards of four beds each. A sun ward with fourteen beds has been erected on the south-east terrace. On this floor also are day and dining rooms, an operating theatre, and sterilizing room. On the first floor there are two wards of eight beds each, one of seven, one of five, three of six, two of three, and two of two beds each. The third floor opens on to a flat roof. A stable block has been converted into *x*-ray and plaster rooms, and a workshop and forge have been provided. There is also a *post-mortem* room, a mortuary chapel, and a disinfecting house. There are other buildings which can be converted into class-rooms, and it is hoped to utilize the greenhouses for training patients in horticulture. Steam cooking, electric lighting, and central heating apparatus have been installed.

The hospital was opened recently by Mrs. David Davies, to whom a vote of thanks was proposed by Sir John Lynn-Thomas, who said that since the opening of the first tuberculosis hospital thirteen years ago 30,000 patients had been treated in the different institutions, and Wales could now boast the finest organization in the world to deal with this scourge. Dr. Llewellyn Williams (medical member of the Welsh Board of Health), who seconded the motion, said that by opening so excellent an institution for the treatment of tuberculosis Mrs. Davies had inaugurated a new era in the fight against tuberculosis in Wales. He went on to say that as 20 per cent. of tuberculosis was believed to be caused by bovine disease every effort should be made to stop the supply of tuberculous milk. At a luncheon which followed, Mr. R. C. Elmslie, orthopaedic surgeon to St. Bartholomew's Hospital, proposed the toast of prosperity to the Memorial Association. He said that a survey of the number of crippled children in London made in 1907 showed that half were crippled by surgical tuberculosis; the proportion had now fallen to one-third. He hoped that parents in Wales would take full advantage of the splendid opportunity now afforded for the treatment of their children; the sooner they were admitted to the hospital the sooner would they recover and be able to return to their parents. Mr. David Davies, in reply, said that the association had now under its control or supervision 1,322 beds—1,014 for pulmonary tuberculosis and the remainder for surgical cases. There were, he said, 160 children still waiting admission, but as soon as the Kensington Hospital was completely equipped it would be possible to deal with all these cases.

SMALL-POX IN GLOUCESTER.

Reference was made last week (p. 1071) to the seriousness of the situation at Gloucester, where there is an outbreak of small-pox. A special meeting of the Gloucester City Council was held on June 20th, to consider a report on the outbreak by Dr. W. H. Davison, assistant medical officer of health for Birmingham, who had been invited to undertake the administrative control of the outbreak of small-pox in Gloucester. According to the *Birmingham Post* of June 21st, Dr. Davison said that on June 12th,

when he undertook control, 148 cases of small-pox were known to exist in Gloucester, only 14 of which had been removed from their homes to the small-pox hospital. Up to June 18th 57 more cases had been discovered, making a total, to that date, of 205 cases. Dr. Davison said that great difficulty was being experienced in getting patients to agree to removal to hospital. There were certain influences at work endeavouring to foster this resistance and throw sand on the administrative machinery designed to protect the community. It had been necessary in six cases to apply for a magistrate's order for the removal of the affected person to hospital, and it could not be too widely known that the sanitary authorities had ample powers to compel persons suffering from small-pox to go to the isolation hospital provided. Captain J. Wood, chairman of the Public Health Committee, detailed the steps that had been taken to cope with the epidemic. Vaccination was no part of the policy of that committee, but he had been assured that there was no hope of dealing with this epidemic except by vaccination. Alderman Dr. Knight said that for some weeks there had been a strong feeling among doctors in the city that small-pox was there, and some were contemplating writing to the Ministry of Health on the matter. Alderman Caldwell said that he did not think it wise to talk too much about the epidemic. He felt sorry that the meeting had been called, and also that notices respecting small-pox in the city had been stuck all over the place. Mr. S. T. Stoddart said that any man who did anything to prevent the disease being checked was rendering a disservice to his fellows. Mr. J. Embling said that the bunkum of vaccination was being put up because of the financial gain that was behind it. The Mayor, Mr. J. O. Roberts, remarked that the local medical officer of health suggested that the expert who should be called in to decide between himself and the medical officer of the Ministry of Health, who diagnosed the disputed cases as small-pox, should be the medical officer of health for Leicester, but that eventually another medical officer was agreed upon. The reports and minutes of the Health Committee and of a subcommittee appointed for dealing with the outbreak were approved by the meeting, with one dissentient. At a meeting of the Health Committee at Gloucester on June 26th it was resolved to recommend to the City Council that the medical officer of health be relieved of all duties connected with the diagnosis of cases of small-pox and chicken-pox and hospital administration in connexion therewith; the medical officer has agreed to this course. The Committee decided to appeal to the Metropolitan Asylums Board for additional medical assistance.

According to the official *Weekly Return of Births, Deaths*, etc., issued by the Registrar-General, a total of 79 cases of small-pox were notified in England and Wales during the week ended June 16th, 1923; they were made up as follows: Heanor (Derbyshire), 1; West Ham, 2; Stapleford (Notts), 5; Gloucester (county borough), 52; Gloucester (rural district), 3; Stroud (Gloucestershire), 1; Wheatenhurst (Gloucestershire), 2; Thornaby (Yorks), 1; Bentley (Yorks), 5; Doncaster (borough), 2; Doncaster (rural district), 4; and Risca (Monmouth), 1. Other cases of small-pox occurring since June 16th have been reported in the newspapers, including 23 cases at Warsop (Notts), 8 at Kirkby-in-Ashfield (Notts), 7 at Tylorstown (Glam), 10 in Middlesbrough, 3 in Birmingham, 1 at Broadheath (Worcestershire), and 2 at Millom (Cumberland).

Infant Welfare Conference.

A conference on infant welfare, under the auspices of the National Association for the Prevention of Infant Mortality and National Baby Week Council, will be held at Carnegie House, 117, Piccadilly, London, on Monday, Tuesday, and Wednesday, July 2nd, 3rd, and 4th. The representatives of the British Medical Association are Professor Louise McIlroy and Dr. Donald Paterson. On Monday the Minister of Health will deliver his presidential address, with Dr. G. F. Still in the chair; a debate will afterwards be held on the causal factors of infant mortality and their prevention; in the afternoon a debate will take place on the value of maternity homes in a maternity and child welfare scheme, with Dr. Janet M. Campbell in the chair; and lectures will be given in the evening by Mr. R. C. Elmslie and Mr. C. E. Wallis. On Tuesday there will be a debate on the scope, staffing, and administration of maternity and child welfare centres, with Mr. H. O. Stutchbury, Assistant Secretary, Ministry of Health, in the chair; in the afternoon a debate will be held on the advisability of combining the functions of the health visitor with those of other officers of local authorities, with Dr. J. W. Robertson in the chair; in the evening there will be lectures by Mr. Bishop Harman and Mr. S. G. Moore. On Wednesday a debate will be held on the maternity convention passed by the Washington Convention in 1919, with Dr. Constance Ellis of Melbourne in the chair; in the afternoon there will be a debate on housing in relation to infant welfare, with the Hon. Sir Arthur Stanley in the chair, and in the evening there will be lectures by Dr. Evelyn Saywell and Miss Norah March. During the conference the annual meeting of the Maternity and Child Welfare Group of the Society of Medical Officers of Health will be held, and there will also be a meeting of the General Council of the Association of Infant Welfare and Maternity Centres; a number of visits to institutions have been arranged. Further particulars may be obtained from the honorary secretary, National League for Health, Maternity and Child Welfare, 117, Piccadilly, W.1.

Paddington Tuberculosis Dispensary.

At the annual meeting of the Paddington Tuberculosis Dispensary on June 25th the Mayor (Alderman H. B. Kenyon) read some figures which had been given him by Dr. Reginald Dudfield, M.O.H. Paddington, to illustrate the effect on the health of the borough of this, which was the first tuberculosis dispensary to be opened in England. Between 1914 and 1922 there had been in Paddington a fall of 49 per cent. in the number of cases of pulmonary tuberculosis notified, and of 27 per cent. in the number of cases of tuberculosis of other forms. The fall in the death rate from pulmonary tuberculosis during the same period had been 23 per cent., and in the death rate from other forms of the disease 26 per cent. Even more gratifying was the substantial fall (27 per cent. in the pulmonary cases) in the mortality of the cases notified since the dispensary was opened in 1909. Sir Robert Philip, upon whose Royal Victoria Dispensary, in Edinburgh, the Paddington work was modelled, congratulated the borough upon its honourable record. It had associated with the preventive and curative aspects of its work the investigation into and amelioration of the social and economic consequences of tuberculosis. Paddington was the first centre in Great Britain to introduce the principle of a Care Committee. It was at Paddington that it was first realized that, on account of the ubiquity of the disease, if tuberculosis was to be effectively dealt with it must be sought for. Sir Robert Philip bore strong testimony to the value of the combination of voluntary and official enterprise. He was confident that, thanks to a concentration of forces, pulmonary tuberculosis was on the run. He was sorry to read in an evening newspaper a statement attributed to a medical man that the consumption problem was probably never more serious than to-day, and that the death rate was higher than when the campaign against consumption was started. Such a statement was a libel on their efforts, and an illustration of ignorance and folly. He rebutted it by quoting the figures of the Registrar-General both for England and Wales and for Scotland. He recalled the fact that in 1910, to a great conference on the subject in the United States, presided over by Mr. Roosevelt, then President, he (Sir Robert Philip) was asked to send a cable stating what in his opinion would be the result of the adoption of the system then under consideration, involving the setting up of dispensaries, sanatoriums, open-air schools, and so forth. In his cable in reply he prophesied a 40 per cent. reduction in tuberculosis mortality within ten years. The New York statistics for the most recent year available showed that during practically that period of ten or eleven years there had been a fall in tuberculosis mortality in New York City of 51 per cent.

ST. CHAD'S HOSPITAL, BIRMINGHAM.

St. Chad's Hospital, Birmingham, was opened in September, 1914, as a non-charitable, self-supporting institution intended to supply special medical and surgical treatment at a moderate inclusive cost. In its report for the year ending March 31st, 1923, the Committee of the hospital attributes the fall in the number of admissions to the general industrial depression, even the low inclusive fees being beyond the means of those who would otherwise have availed themselves of the hospital services. The fall is considerable, the number of in-patient admissions having dropped from 1,184 in 1920-21 to 752 during last year. The hospital staff now consists of 32 specialists, drawn from the consultants of the Birmingham hospitals. The hospital can accommodate 100 patients. It is run on business lines, with shareholders and a Board of Directors which controls the institution subject to the powers conferred upon the Medical Committee. The rules governing admission to the hospital are not quite clear. In the report of the Committee it is stated that "patients can obtain admission by applying to the House Governor, who is empowered to assess the amount of fees payable according to the nature of the treatment required and the financial circumstances of the patient." Again, "a patient admitted in this way will be placed under the care of a member of the staff who is a specialist for the disease from which he or she (*sic*) is suffering." And, "in the interest of the patient it is strongly recommended that a letter of introduction from his or her doctor should be presented at the time of application, or the name of the doctor given." On the other hand, in an article by Mr. William Billington, published in the BRITISH MEDICAL JOURNAL on February 21st, 1920, it is stated that no patient can be admitted except on the recommendation of a member of the medical staff; and that the amount of the inclusive fee (minimum charge 5 guineas a week) is arranged between the patient and the member of the staff concerned. Mr. Billington also said that the ordinary relationship between consultant and practitioner is maintained, the latter being invited where practicable to assist in the treatment. It appears that something like the group clinic method exists in the hospital, since each member of the staff has the right to call upon any other member for assistance without fee in treating what is called the "composition" patient.

According to the report the Committee has endeavoured to make St. Chad's fulfil as completely as possible the conditions laid down by the Advisory Committee to the Minister of Health, and it is stated that after a consultation between the Chairman of the Committee and Lord Dawson, it has been made possible for patients to make direct application to the hospital for admission and treatment. It seems likely that the Hospital Committee and the medical staff are not quite sure yet of the position of the hospital in the scheme of things; and that with the incentive of a falling admission list they are feeling their way in various directions. Whether a system of receiving direct applications from patients, who are then placed under the care of a specialist selected by some method not at present clear, will be satisfactory is a matter of experiment. But all experiments in the use of paying hospitals are interesting, and possibly valuable.

LONDON AND COUNTIES MEDICAL PROTECTION SOCIETY.

The annual general meeting of the London and Counties Medical Protection Society was held for the first time at the society's new headquarters, Victory House, Leicester Square, on June 20th. Sir John Rose Bradford, who presided, referred regretfully to the loss which the society had sustained during the year in the death of three members of the Council—Colonel E. C. Bensley, Dr. D. B. Balding, and Dr. J. C. Pollock Muir—each of whom had served the society for more than thirty years. The society's membership had increased during the year, but unfortunately it still remained true that there were many members of the medical profession who did not belong to either of the defence societies. He could not help thinking that if they were acquainted with the risks they ran in the course of their daily work, and with the valuable assistance which either of the two societies was capable of rendering, they would seize the earliest opportunity of becoming members. The finances of the society were in so satisfactory a state that the Council was able to waive the entrance fee in the case of the more junior members of the profession—those applying for membership within a year of registration—and there was now no difference in procedure as regards entrance fees or annual subscriptions between this society and the Medical Defence Union. The year had been marked by a closer association between these two bodies. A joint standing committee, including representatives of both, had been set up. The speaker drew attention to the number of instances in which practitioners had charges brought against them owing to their remissness in not examining the patients by modern methods, particularly *x*-ray examination in cases of fractures. Numbers of cases came before the society's council in which very obvious precautions had been neglected. Many practitioners, although they might, perhaps, recommend that a patient should have *x*-ray examination, did not protect themselves by means of a written record of the fact that the patient had declined to do what was recommended.

On the motion of Dr. C. M. Fegen, seconded by Mr. Sidney Spokes, Sir John Rose Bradford was re-elected to the presidency unanimously and with hearty acclamation. Dr. Fegen mentioned that Sir John had taken a principal part in bringing about the closer co-ordination and co-operation which now existed between the two defence societies. Dr. Fegen himself was re-elected treasurer, and all the retiring officers were re-elected.

The annual report, which was adopted, stated that the number of applications from members asking for advice and assistance was 645, as compared with 465 in the previous year. In the great majority of cases satisfactory results were obtained without litigation. The provision made by the society for indemnifying members against costs of the other side and damages in unsuccessful cases continued to give satisfactory results, and the Council had not yet had occasion to draw upon the sum of £20,000 provided for each year by an excess insurance policy with Lloyd's. After very careful consideration the Council had resolved, for the present at all events, not to elect as members any dentists who did not possess a registered degree or diploma.

Scotland.

THE CHAIR OF BACTERIOLOGY AT EDINBURGH.

THE court of the University of Edinburgh at its meeting on June 18th appointed Dr. Thomas Jones Mackie to be Robert Irvine professor of bacteriology in succession to the late Professor James Ritchie. Professor Mackie, who was born at Hamilton and educated at the academy there, is a Glasgow graduate, having taken the degrees of M.B. and Ch.B., with honours, in 1910, when he was awarded the Brunton Memorial Prize as the most distinguished graduate of his year. During the war he saw service at Gallipoli and afterwards had charge of a bacteriological laboratory at Alexandria. In 1917 he was released on his appointment to the Wernher-Beit chair of bacteriology in the University of Cape Town. Before the war he had been assistant in bacteriology with the director of the Bland-Sutton Institute of Pathology at the Middlesex Hospital, and has to his credit a large amount of valuable research work in bacteriology. In 1921 he received the M.D. degree, with honours, from Glasgow with a thesis entitled "Studies in Intestinal Bacteria."

DEPARTMENT OF ZOOLOGY AT EDINBURGH.

At the same meeting of the University Court a letter was read by Principal Sir Alfred Ewing intimating from a donor, who desired to remain anonymous, a gift of £20,000 5 per cent. War Loan, to form the nucleus of a fund to provide a new department of zoology. It is hoped that other

support may be forthcoming in the near future to enable the department to be established. The laboratory accommodation for this department is at present quite inadequate, and both teaching and research are carried on under serious disadvantages. The department is well staffed, for in addition to the professorship of natural history which has existed since 1767, a chair in zoology was instituted in 1919, and there are four lecturers in zoology, a lecturer on genetics since 1911, and a lecturer on comparative anatomy since 1911.

Leave of absence has been granted to Professor Cossar Ewart, Regius Professor of Natural History, to enable him to accept the invitation of the Government of Australia to attend the Pan-Pacific Science Congress in Australia. His recent researches into the origin of the merino sheep and on the evolution of wool have been of great practical value, and he has been specially invited to contribute to the proceedings of the Congress.

SCOTTISH BOARD OF HEALTH.

The fourth annual report of the Scottish Board of Health has been issued and we hope to refer to it at more length in future issues. We will now only note the statement that throughout 1922 the policy of the Board was largely determined by two factors—the need for economy and the distress caused by the prolonged trade depression. The policy of economy prevented the Board from sanctioning developments that were not urgently necessary, and caused existing services to be restricted wherever this was possible without danger to the public health. Unfortunately the ban on developments has restricted several of the health services, notably the school health service and maternity and child welfare services, which were practically only in course of development when the need for economy arrested them.

SCOTTISH SOCIETY OF ANAESTHETISTS.

At the annual meeting of the Scottish Society of Anaesthetists, held in the Hall of the Faculty of Physicians and Surgeons on May 26th, a report by the executive on the present remuneration and status of specialists in anaesthetics in Scotland was considered and adopted. The report stated that the fees in Scotland are at present much below those paid in London and compare unfavourably even with those usual in the English provincial centres. Emphasis was laid especially on the following points:

1. At the request of surgeons, anaesthetists frequently reduce their fee to suit the pocket of the poorer private patients in exactly the same spirit as the surgeons themselves do. To this they have no objection, but unfortunately it seems to be a general experience among anaesthetists that what may be termed their standard fee for an administration of average gravity in a patient of ordinary means has come to be looked upon as a maximum to be exceeded upon very rare occasions. It is certain that a considerable number of patients are charged an anaesthetic fee which is too small in comparison with the other expenses associated with the operation.

2. The remuneration paid even to special anaesthetists of experience and acknowledged standing is little if any greater than that accorded to the surgeon's assistant, who is usually a man of junior standing and only at the beginning of his career.

3 In the teaching hospitals, also, the present status accorded to the specialist in anaesthetics shows too little recognition of his responsibility and of his special training and experience.

4. The developments of modern surgery are such as to require the services of the properly trained and fully responsible anaesthetist, and it is felt that neither in respect of status nor remuneration do the present conditions give recognition and encouragement to good and sustained work. For the making of a good anaesthetist, natural aptitude, proper study and prolonged hospital experience are all necessary, and unless those who devote themselves to the subject can look forward to reasonable prospects, the progress of the science and practice of anaesthesia must suffer.

The society recognizes that any attempt to lay down rigid rules and scales of remuneration is not in accordance with the spirit of the profession. The individual specialist in anaesthetics must charge for his services in accordance with his own standing. It is hoped, however, that ventilation of the matter in this way may be of value in bringing before the profession the unsatisfactory nature of the present position.

Ireland.

IRISH MEDICAL COMMITTEE.

A MEETING of the Irish Medical Committee was held in the Royal College of Surgeons on June 20th. There were present: Dr. Joseph Power, Vice-Chairman, in the chair, Senator W. O'Sullivan, Drs. P. J. Hamilton, J. M. Kenny, G. Maguire, G. A. Hickey, R. J. Rowlette, M. R. Hayes, D. Forde, W. McCann, J. G. Holmes, J. S. Darling, D. Walshe, T. B. Costello, H. T. Warnock, P. J. Grogan, P. T. Magner, J. P. Shanley, A. D. Courtney, P. J. Quinlan, Dr. Hennessy, Medical Secretary, and Mr. C. H. Gick, Secretary. Apologies for absence were received from Drs. R. J. Johnstone, M.P., Chairman, W. S. Morrison, M.P., E. C. Thompson, P. J. O'Brien, W. J. O'Sullivan, J. C. King, P. McKenna, W. W. Murphy, J. Counihan. Mr. R. J. Johnstone, Chairman, wrote stating that he wished to resign the chairmanship, but the Committee directed that he should be urged to reconsider his decision.

Advisory Committee to the Irish Insurance Commission.

A letter was received from the Irish Insurance Commission inviting the Irish Medical Committee to nominate three medical practitioners to act on an Advisory Committee to the Insurance Commission (Free State). Drs. Rowlette, W. O'Sullivan, and Hennessy were selected.

The Insurance Commission (Free State) forwarded a draft of the proposed report with regard to (1) Investigation of complaints against medical certifiers; (2) the appointment of a Complaints Committee to investigate, in the first instance, charges made against medical certifiers, etc. The report was considered in detail, and it was resolved:

> "That the Irish Medical Committee is of opinion that the present arrangement whereby complaints against medical certifiers are submitted to Local Medical Committees should be continued, and that only such cases where the Local Committees failed, within a reasonable time, to take action, should be submitted to the proposed Complaints Committee.
>
> "2. That there may be allowed to either party an appeal from the decision of the Local Medical Committee to the Complaints Committee.
>
> "3. That the names of Dr. P. Grogan and Dr. P. Magner be forwarded to the Commission to represent the Irish Medical Committee on the Complaints Committee."

The revised form of medical certificate, and certain queries sent to the medical certifiers by approved societies, hitherto sent through the Insurance Commission, were considered. The Committee decided that it was inadvisable as well as a violation of the agreements of medical certifiers to forward certain queries through the approved societies, but that it would be prepared to consider favourably the adoption of such queries if embodied in the form of a certificate which would be used only at intervals agreed upon between the Insurance Commission and the Medical Committee.

Irish Medical Services.

A long discussion took place with regard to the position of the Irish Medical Services both as they affected the public and those members of the profession engaged in their administration. It was resolved:

> "That an Executive Subcommittee, consisting of the Chairman, Vice-Chairman, Drs. Rowlette, O'Sullivan, Hamilton, Hayes, Shanley, Magner, J. M. Day, and the Secretaries, be appointed, and that it shall act as a deputation to wait on the Minister for Local Government and urge upon him (1) the necessity for the establishment of a Ministry of Health for Ireland and a National Medical Service on the lines recommended by the Irish Public Health Council; (2) pending legislation that the deputation urge on the Minister the grievances of medical officials in regard to salaries, holidays, pensions, etc."

The Medical Secretary was directed to continue his representations to the Ministry of Local Government in connexion with the refusal of that Department to sanction increases for medical officers passed by the local authorities in Mullingar, Kinsale, etc.

Red Cross on Motor Cars.

Arising out of communications in regard to the continuance of Red Cross and other distinctive marks on the motor cars of medical practitioners, it was resolved:

"That the Irish Medical Committee considers the use of the Red Cross on motor cars of medical practitioners, during the recent troubles, was justifiable, but it is now of opinion that all such distinctive marks should be dispensed with in districts where peace is restored."

Medical Attendant to St. Patrick's College, Maynooth.

The position of medical attendant in St. Patrick's College, Maynooth, and resolutions passed by the County Kildare medical practitioners, were considered. The Committee expressed its sympathy with Dr. Grogan and adopted the resolutions passed by the County Kildare doctors, which stated (1) that the increase asked for in the salary of Dr. Grogan as medical attendant to St. Patrick's College, Maynooth, should be granted without further delay; (2) that the County Kildare doctors considered it unprofessional, in the circumstances, for any doctor to accept Dr. Grogan's office, and that if any doctor did so they would not recognize him professionally.

Medical Fees for Life Insurance.

The following resolution was adopted:

"That the Irish Medical Committee is of opinion, for medical examination in life insurance cases, that if the profession, throughout Ireland, take proper steps to have itself locally organized it will secure the fees obtained and obtainable by the Limerick doctors. As the result of united action the doctors in the borough of Limerick are paid the following scale of fees for life insurance examinations:

	£	s.	d.
Industrial assurance:			
Under £100		10	6
Ordinary:			
£100 to £500 (inclusive)	1	1	0
Above £500 and less than £1,000	1	11	6
£1,000 or any higher sum	2	2	0

Remuneration for Holidays, Consultations, Administration of Anaesthetics, etc.

The following resolutions were adopted:

"That the remuneration in dispensary districts for temporary work, in normal conditions, should be a minimum of £6 6s. per week, and for hospitals £5 5s. per week. For the administration of anaesthetics and assisting at operations, £2 2s. Where more than one anaesthetic is administered at one visit: First case, £2 2s.; subsequent cases at £1 1s. each.

"That the substitute nominated by the doctor going on leave should be appointed by the local authority—if the arrangements made for the discharge of the duties are satisfactory to the Local Government Department. Canvassing by doctors against the nominee of the doctor going on leave is to be very strongly condemned. Consultations under the Medical Charities Acts: Day, £2 2s. and mileage; night, £3 3s. and mileage. Midwifery, in the day, £3 3s. and mileage; at night, £4 4s. and mileage."

Tax on Motor Cars.

It was resolved:

"That motor cars engaged in work under the Medical Charities Acts should be exempt from taxation, and that the tax paid on motor cars of doctors engaged in other practice should be on pre-war basis of allowance."

IRISH (FREE STATE) ARMY MEDICAL SERVICE.

At the conclusion of the proceedings of the Irish Medical Committee the Chairman congratulated Dr. M. R. Hayes, F.R.C.S.I., late Director-General of the Free State Army Medical Service, on his success in organizing, under very great difficulties, a medical service which proved in every way equal to the difficulties it was called upon to meet during the recent troubles in Ireland. Dr. Hayes, in thanking the chairman and the meeting for their appreciation of his services, stated it was due from him to acknowledge the whole-hearted support he had received from the Irish medical profession, without which he believed his task would have been a great deal more difficult. General R. Mulcahy, Minister of Defence, at a recent meeting of the Dail also paid a very high tribute to the services of Dr. Hayes during the time he acted as Director-General of the Army Medical Service in the Free State.

Correspondence.

ETHER *VERSUS* CHLOROFORM.

SIR,—There must be many surgeons who, like myself, were pleased with the strongly expressed opinion of Dr. McNamara in favour of ether which appeared in the JOURNAL of June 9th. In the issue of June 23rd (p. 1076) Dr. Samways argues for chloroform, but I venture to state that few anaesthetists and surgeons of ripe experience will agree with his views or the statements by which he attempts to support them.

Anyone who reads the daily papers with average regularity must be appalled by the frequency of the headline "Death under anaesthetic," and no one will dispute that the disaster has practically always occurred when chloroform (in whole or part) was the drug employed.

I have had the misfortune to see ten deaths under anaesthesia. Two were patients of my own; the anaesthetists were well known experts, and death occurred during induction and while I was preparing my instruments for operation. In one patient—an apparently healthy man—a few inhalations of chloroform were followed by sudden pallor, dilatation of pupils, failure of the pulse and respiration, and death. The *post-mortem* examination gave no satisfactory clue to the disaster.

There are few surgeons who cannot recall one or more similar tragedies.

Surely Dr. Samways is not accurate in his statement that "chloroform has the advantage of not irritating the bronchial tubes, of easily controlling movement, and of seldom causing after-sickness." If "open ether" be preceded by a hypodermic injection of 1/100 grain of atropine and pushed to the stage of complete relaxation the attributes he claims for chloroform will be equally well secured by ether. Above all, the patient will be under the influence of a drug which stimulates the cardiac and respiratory centres rather than depresses them. Even if we were to allow his contentions in favour of chloroform, our first interest must be the safety of our patient, and what comparison is there between a possible few temporary discomforts and the appalling tragedy of a "death on the table"? Very many patients have died, and others will yet die, under chloroform, even when the anaesthetic is given by an expert; such an event is extremely rare under ether anaesthesia. Why run the unnecessary and added risk by employing chloroform?

Dr. Samways says that "ether as an anaesthetic requires a complicated apparatus." My reply is that, if administered by the "open" method, it only needs a few layers of closely folded gauze on which the drug is freely poured.

It seems to me that he both weakens his argument in favour of chloroform and strengthens it in favour of ether when he says that "From what I have seen of the administration of an anaesthetic abroad I am not astonished that ether should be popular. Ether lets off the anaesthetist . . ." I ask "Why?" My own explanation would be that the anaesthetists whom Dr. Samways met are wise men who, when confronted with two dangers, had no hesitation in choosing the less.

I apologize for the length of this letter, and only plead the wisdom and importance of the contentions raised by Dr. McNamara. If Dr. Samways will do me the honour of allowing me to arrange for him a demonstration of the open ether method I shall be delighted to avail myself of the opportunity.—I am, etc.,

London, W., June 22nd. HERBERT TILLEY.

SIR,—Dr. Samways (June 23rd, p. 1076), referring to my letter, says that "'Extremely common' is a loose phrase which, I believe, no statistics justify."

It is unnecessary to remind readers of London newspapers that hardly a week passes without the melancholy record of one or more of these tragedies. On the day on which I wrote my letter it was recorded that a London coroner, holding an inquest on one of these victims, said that he had already on that day held three similar inquests. Some time ago it was stated that one famous

London hospital had 42 chloroform fatalities in eight years. And this hospital was not alone in its misfortunes.

Dr. Samways says that "Ether as an anaesthetic requires a complicated apparatus." It does not. With "open" ether, which is the ideal, any simple apparatus like Rendle's inhaler, or even a tumbler with a towel and sponge, is sufficient. The Clover inhaler and all other closed apparatus forcing the patient to rebreathe his own poison are a mistake. Dr. Samways thinks if the truth were known that "If after-effects could be taken into account and tabulated," ether might present the darker picture. Where is this truth to be found? Not in the coroner's court, because the patients do not die; not in the experience of the anaesthetists who use the "open" ether method, for they are unhesitating in its praise. Many years ago, when I first wrote on this subject, I saw a statement by an American surgeon that at that time in all Philadelphia there was only one expert anaesthetist, and that although the ether was generally administered by non-experts there was almost no mortality under anaesthesia. Dr. Samways gives details of his method of giving chloroform, and implies that if others would do likewise things would be all right. He says that deaths under anaesthesia are very rarely the direct fault of the anaesthetic.

If this were true, then the fault must be with the anaesthetist. Every London hospital has one or several expert anaesthetists who devote most of their time to the practice of anaesthesia. Are we to assume that these gentlemen are all duffers?—I am, etc.,

London, W., June 22nd. J. MCNAMARA, M.D.

THE EDUCATION OF MYOPES.

SIR,—Anything by Dr. Harrison Butler is well worth reading, but if he agrees with me that the use of the eyes for near work has nothing to do with myopia why should he forbid his patients to use their eyes for near work? I always tell mine that they can read or use their eyes for near work as much as they like, glasses being given so that the book is not held too close.

The evidence as to the chief exciting cause of myopia is overwhelming. Myopia is caused by distension of the eye due to back pressure through the veins, such as is caused by lifting a heavy weight. Heredity may give anyone a weak sclerotic as it may give a man weak muscles, but in absence of the exciting cause he will probably remain normal sighted. As chairman of the Ophthalmic Board, Central London Medical Boards, National Service, I had exceptional opportunities of studying a very large number of cases of myopia, many of whom had not previously had their eyes examined. Myopia, especially the higher degrees, appears to be much commoner in the labouring than in the professional classes, although a large number of the former will not wear glasses.

Space will not permit me to go into details, but the reader will find them in my "Arris and Gale Lecture" (*Lancet*, March, 1921). On publication of the lecture I received letters agreeing with the conclusions from all parts of the world. Let the reader examine for himself any case of myopia, without leading questions, inquiring as to onset, progression, etc. A man, for instance, may have normal sight until he is 22 or 23 and be accustomed to go to the music hall and see clearly from the gallery, but on changing from a sedentary employment to one in which he has to do heavy lifting finds that his sight steadily deteriorates and that he is not able to see from the gallery, and then after a time gives up the theatre. He may even come to the conclusion that the work is affecting his eyes and go back to a sedentary employment where he has to use his eyes for near work, and that there is then no further increase in his myopia.—I am, etc.,

London, June 19th. F. W. EDRIDGE-GREEN.

POLYTHELIA.

SIR,—I am much obliged to your correspondent, Dr. Graham Renshaw, for his remarks on my article "Polythelia." The fact that the situation of the accessory nipple in all his three cases coincides with the situation of the nipple in my own case is interesting, but it is difficult to see what the significance, if any, can be. Supernumerary breasts are most commonly found upon the anterior thoracic wall near the mammillary line; less commonly are they situated in the axillae and on the anterior aspect of the abdomen; occasionally upon the shoulder; and on very rare occasions upon the thigh.

I am not aware of any other case of polythelia in the female subject, nor have I been able to find any reference to an authentic case in medical literature. In regard to the condition of "double nipple" in the male, one is aware that the abnormality is not sufficiently uncommon to merit it being described as a rarity, but I am not aware of any method by which it is possible to distinguish definitely between polythelia (supernumerary nipple) and polymastia (supernumerary breast) in the living male, except, perhaps, in the case of abnormally stout subjects. The mammary tissue of the average normal male may be scarcely palpable and in polymastia the supernumerary breast may be so minute as to be scarcely distinguishable. Is it not therefore more likely that Dr. Renshaw's cases are really cases of polymastia?

I have always, without dogma, held the view that such conditions as polythelia and polymastia are to be regarded as atavistic reversions. Many observers, however, do not accept this view. Whitridge Williams (Baltimore) has observed that in not a few instances an apparent hereditary influence can be traced. Others prefer to accept the theory of Ahlfeld concerning the distribution of the mammary tissue.—I am, etc.,

Bradford, June 16th. R. DOUGLAS HOWAT.

BLOOD SUGAR ESTIMATIONS BY GENERAL PRACTITIONERS.

SIR,—The recent discovery of insulin has led to a large amount of correspondence in your columns on blood sugar, and has increased the interest taken in diabetes by general practitioners. The prominent advertisements in the JOURNAL of Professor Maclean's excellent book on the treatment of diabetes by modern methods, and those of a firm of chemists supplying the necessary solutions for these estimations, will probably result in a number of medical men attempting what I believe to be impracticable, and to a large extent unnecessary.

My experience of over twenty years in a large practice, in which all urines are examined as a routine, is that the number of glycosurias is very small—perhaps six to ten cases per annum. Of these, nearly all fall into one of two classes: (1) temporary glycosuria due to a septic focus, often situated in the teeth or tonsils, (2) elderly persons with a deficient storage capacity for sugar. The former are highly amenable to treatment, and the latter pass comfortable lives on a slightly restricted diet, and eventually die of something else. For these blood sugar estimations are unnecessary.

There remains a very small number—not one in twelve months—of true and severe diabetes; cases where it is impossible to get sugar-free urine on a diet sufficient to keep them alive. Even with these very little can be learnt from frequent blood sugar estimations; one investigation is sufficient to exclude renal glycosuria, and this can be done better at a laboratory.

However, if a general practitioner wishes to do it himself, is it practicable to do so by Maclean's method? This so-called simple method requires fifteen special pieces of apparatus and six special solutions. It requires a room, or at least a bench, set apart for its use. It takes one hour to carry the test through, and experimental errors due to want of practice in the use of capillary tubes make it essential to perform more than one estimation in order to obtain a reliable result.

My opinion, after having tried the method, is that we should carry on at present on the old lines, testing our treatment by quantitative urine estimations with Fehling's solution, and curing a large proportion of our patients. If we wish to experiment with insulin one complete blood sugar estimation should be made at a laboratory, and overdosing guarded against by keeping a mere trace of sugar present in the urine during its administration.

I believe this is the only practicable method, and the

attempt to do more will involve the busy practitioner in a large and unnecessary expenditure of time and trouble, and should be left to scientific workers.—I am, etc.,

Poplar, June 18th. W. H. F. OXLEY.

THE PEPTONE TREATMENT OF ASTHMA: A DISCLAIMER.

SIR,—In a recent monograph, entitled *Asthma*, by Mr. Frank Coke, certain statements are attributed to me to which I must emphatically take exception. It is affirmed that I prescribe "5 per cent. each of Armour's and Witte's peptones" intravenously. I have never done so, nor should I think of recommending such a dangerous concoction. The peptone prescriptions I have given will be mainly found in the BRITISH MEDICAL JOURNAL (1921, vol. i, p. 698), where it is stated *inter alia* that when the Armour peptone is not used alone (as I generally recommend) a 5 per cent. solution may be tried of a mixture containing *one* part of Witte's peptone to *three* parts of "peptone siccum" (Armour), the latter greatly differing in composition from the ordinary Armour No. 2 peptone in that it contains extremely little proteose. It will be seen how wide is the difference between this and the preparation attributed to me above. The other statement to which I take exception is that, as an explanation of the *modus operandi* of peptone, I have suggested "that the peptone, being a common derivative of all proteins, may desensitize the patient to them all." I should be sorry to think that I ever offered a suggestion so crude. My view, uniformly expressed, is that the peptone interacts with the fluids and tissues of the body in the production of a poison which desensitizes to a poison produced from the interaction of the fluids and tissues with the antigen-antibody complex.

It is a recognized rule in medical authorship to give chapter and verse in verification of statements attributed to others; yet no reference to any paper of mine on the peptone treatment of asthma is given in this volume, and I would certainly have expected that, in the case of a delicate method of treatment, care would have been taken in the matter of quotation. This is the more inexplicable in view of my responsibility for the method, a consideration which is entirely ignored.—I am, etc.,

London, W., June 19th. A. G. AULD.

FREEDOM OF NEGRO RACES FROM CANCER.

SIR,—The May number of *American Medicine* contains an article entitled "The Sewage System of the Human Body," by Sir William Arbuthnot Lane. On page 268 Colonel McCarrison is quoted as never having seen a case of asthenic dyspepsia, of gastric or duodenal ulcer, of appendicitis, of mucous colitis or of cancer, during the nine years he practised in the Himalayas. On the same page Dr. Hoffman is quoted as having asserted that during a seven months' trip to South America he did not come across a single case of cancer amongst the native Indians or mixed bloods.

With the above statements my personal experience in South Africa fully agrees. For six and a half years I was District Surgeon in the Orange Free State. The district in which I practised had a native population of 14,000, the large majority of the Basuto race. During the whole of that period I never saw a single case of gastric or duodenal ulcer, colitis, appendicitis, or cancer in any form, in a native, although these diseases were frequently seen amongst the white or European population.

Whilst, however, acting as locumtenent for a colleague in the Western Province of South Africa, I saw two cases of carcinoma of the breast in native women. They both belonged to the coloured race peculiar to that part, a race which has lived under civilized conditions for the last 300 years at least. These facts are well known to all medical men in South Africa who have practised amongst the native races. In view of the present stimulus given to research in the causation of cancer, I think the article and facts quoted above ought to receive serious consideration.—I am, etc.,

London, N.W., June 16th. F. P. FOUCHÉ.

Obituary.

W. D'ESTE EMERY, M.D., M.R.C.P.,

Formerly Director of Laboratories and Lecturer on Pathology and Bacteriology at King's College Hospital.

WE regret to record the death on June 19th, at Red Cross Hospital, Brighton, of Dr. Walter d'Este Emery, at the age of 53. Dr. Emery was educated at Queen's College, Birmingham, and St. Bartholomew's Hospital, and graduated B.Sc.Lond. (with first-class honours in physiology) in 1892, M.B.Lond. (gold medal in medicine and obstetric medicine) in 1896, and M.D. (qualified for gold medal) in 1897; he had taken the L.R.C.P.Lond. and M.R.C.S.Eng. in 1894, and obtained the M.R.C.P.Lond. in 1918. After having been house-physician and obstetric house-surgeon at Queen's Hospital, Birmingham, he was appointed assistant surgeon to the Birmingham Skin and Urinary Hospital, and lecturer on pathology and bacteriology in the University of Birmingham. He was next appointed pathologist to the Paddington Green Children's Hospital, and afterwards became director of the laboratories and lecturer on pathology and bacteriology at King's College Hospital, and lecturer on general pathology at the London School of Medicine for Women. He was a former Hunterian professor to the Royal College of Surgeons. He was a Fellow of the Royal Society of Medicine and of the Pathological Society of Great Britain and Ireland, and a member of the British Medical Association; at the Annual Meeting of the Association in Birmingham, in 1911, he was vice-president of the Section of Pathology. Among his published works are *Clinical Bacteriology and Haematology*, a practical handbook which has passed through six editions, *Tumours, Their Nature and Causation*, and *Bacteriological Diagnosis for Practitioners*. He was also the author of many contributions to periodical medical literature, and was at one time editor of the *Journal of Vaccine Therapy*. Owing to ill health he had recently retired, and was living at Shirehampton, near Bristol.

Sir GEORGE LENTHAL CHEATLE writes: All who knew Dr. d'Este Emery were deeply concerned to learn that the state of his health necessitated his retirement from the teaching staff of King's College Hospital. They are now more deeply grieved to hear of his early death. In the natural course of busy lives, most of us know only of his public career; those who knew him always recognized that they were in contact with a modest man who possessed an original and philosophical mind combined with great intellectual ability. He seldom spoke on matters to which he had not devoted conscientious study, and, in consequence, anything that he said was interesting and worthy of the attention it attracted. Dr. Emery's brilliant career as a student, and the variety in the branches of work in which he had studied and shone specially fitted him for original work. Some of the early researches which I heard him describe before the Medical Research Club were the result of pioneer work. The conclusions at which he arrived were always based upon accurate, ingenious, and controlled experiments, and were received by that critical body as coming from one in authority. Philosophical and profound, he was also a clear and concise teacher, and the advice which he gave to me and to others was always of value, not only in elucidating the point at issue, but also in aiding the further investigations to which his opinions led. Latterly, his labours at King's College Hospital were almost more than one man could accomplish; he had to teach pathology and bacteriology, and to superintend the many and varied calls that clinical claims made upon his department. In many ways this was a great pity; his knowledge, originality, and desire for research work could not be granted the scope that they required. They were almost entirely limited to simplifying, and to rendering more accurate, the usual technique employed in the investigation of clinical material. The ingenuity and resource of his methods were examples of the loss he was to the work of exposing to light facts hidden in dark places. The students and patients of King's

College Hospital have lost an invaluable servant, science has lost a master, and his friends have lost an accomplished, an inspiring, and a lovable companion.

WALTER PETTER, M.B., C.M.EDIN.,

Honorary Physician to the Darlington General Hospital.

DR. WALTER PETTER, who died on May 24th, was born at Barnstaple in 1857, and received his medical education at the University of Edinburgh, where he graduated M.B. and C.M. in 1883. He distinguished himself in medicine, and was house-physician in the Edinburgh Royal Infirmary to Sir Douglas McLagan. Shortly afterwards he became assistant to the late Dr. Munro of Barnard Castle, where his skill, straightforwardness, and genuine kindness won him many friends. In 1887 Dr. Petter settled in Darlington, where he soon obtained the success he deserved, making many friends among his fellow practitioners and the general public. He was medical officer to the post office and the training college and medical assessor to the county court judge. In 1914 he was appointed assistant honorary physician to the Darlington General Hospital, and in 1919 he became full physician.

During the war he worked very hard; in addition to his private practice he acted as civilian medical officer to the Durham Light Infantry and physician to the V.A.D. Military Hospital. For four years in succession he was unanimously elected chairman of the Darlington Division of the North of England Branch of the British Medical Association, and was regularly in the chair at every meeting discharging the onerous duties with supreme tact and fairness; but his intimate friends who watched him are convinced that the extra duties imposed by the war shortened his life considerably, especially as he had never enjoyed what might be called robust health. After the war he did a large amount of work on pension boards. Those who served with him on the hospital staff regret much the loss of a colleague so loyal to the hospital and its medical and nursing staffs; he was beloved by his patients and by all who knew him.

The funeral, which took place at the Darlington West Cemetery, was attended by most of his fellow practitioners and by a very large number of the general public; the hospital committee and nurses were well represented. He leaves a widow (who did most valuable war work as commandant of the V.D. Hospital, Woodside, Darlington), one daughter, and one son to mourn his loss.

WILLIAM FLEMING,

Secretary of the Royal College of Physicians of London.

A WELL known and widely respected figure in the medical world has passed away in the person of Mr. William Fleming, the Secretary of the Royal College of Physicians, who died suddenly on June 21st. Mr. Fleming had passed fifty years in the service of the College, and it would be difficult to point to a finer example of complete and unswerving devotion to duty. For him the College came before all other considerations, and although advancing age and ill health made their insistent demands for rest, he remained at his post and died, as we think he would have preferred to die, in harness to the last. From the days of Sir Thomas Watson to the present time he had seen Presidents and College officers come and go. He had watched the changes taking place during his long association with the College, and it was pleasant to find him in reminiscent mood, when he sketched with delightful touch the characters and peculiar personal traits of distinguished Fellows of the College who have long since passed from our ken. His knowledge of the traditions and history of the College was profound, and from his long experience he could always provide the reason for some ceremony or the origin of some practice. His courtesy in discharging the duties of his office made him respected by all with whom he came into contact, and his loss will be deeply felt. For him we can truly subscribe the epitaph he would have valued—"Well done, thou good and faithful servant."

The Services.

INDIAN MEDICAL SERVICE.

THE annual dinner in London of the Indian Medical Service was held on June 20th, when ninety-seven officers and two guests were present.

After dinner Major-General Sir W. R. EDWARDS, K.C.B., K.C.I.E., who was in the chair, spoke at some length about the present and future of the Service. He indicated that many Indian politicians held that the Indian Medical Service could be conducted efficiently by medical men of Indian birth possessing British qualifications, and that a sufficient number of such men would be available. With regard to the present he said: "I am informed by the India Office that regulations have now been made by the Secretary of State in Council under Rule 12 of the Devolution Rules reserving for officers of the Indian Medical Service a total of 305 civil posts and thus providing civil employment for 388 Indian Medical Service officers, including leave and study reserve. Of these posts 65 are under the Government of India and 240 under Local Governments. Of the latter the posts of Surgeon-General, Inspector-General of Civil Hospitals and Director of 1st Class Provincial Bacteriological and Pasteur Institutes will be filled by the nomination of the Government of India. I understand that the regulations are declared to be provisional and without prejudice to the final orders to be passed by the Secretary of State in Council when he has received and considered the report of the Royal Commission which is being appointed under the chairmanship of Lord Lee of Fareham to inquire into the Public Services, including officers of the Indian Medical Service in civil employment. The text of the regulations will be published in the *Gazette of India*, and copies will be obtainable shortly from the India Office." Sir William Edwards expressed the view that this did not go far enough and that appointments of professors, of alienists, as clinical examiners, and to jails and to public health offices should be made by the Government of India from an all-India service. It might very well happen that a provincial service would not on occasion be able to provide a suitable person when there was a vacancy in one of these services.

The officers present were as follows:

Major-Generals: Sir W. R. Edwards, K.C.B., K.C.I.E., C.M.G. (Chairman); Sir R. H. Charles, G.C.V.O., K.C.S.I., B. H. Deare, C.I.E., Sir G. G. Giffard, K.C.I.E., C.S.I., T. Grainger, C.B., G. F. A. Harris, C.S.I., H. Hendley, C.S.I., J. B. Smith, C.B., C.I.E.

Colonels: Sir H. E. Banatvala, C.S.I., P. F. Chapman, C.I.E., J. K. Close, J. Crimmin, V.C., C.B., C.I.E., J. Garvie, T. A. Granger, C.M.G., C. R. M. Green, A. J. Macnab, C.B., C.M.G., J. J. Pratt, W. A. Quayle, H. Austen Smith, C.I.E., T. Stodart, C.I.E., R. G. Turner, C.M.G., D.S.O., C. N. C. Wimberley, C.M.G.

Lieutenant-Colonels: A. Alcock, C.I.E., W. G. P. Alpin, O.B.E., J. Anderson, C.I.E., F. L. Blenkinsop, J. T. Calvert, C.I.E., W. V. Coppinger, D.S.O., D. G. Crawford, J. M. Crawford, O.B.E., C. D. Dawes, C. Donovan, C. Duer, C. A. Gill, J. D. Graham, C.I.E., J. A. Hamilton, C.M.G., C. T. Hudson, C.M.G., E. V. Hugo, C.M.G., J. G. Hulbert, C. H. James, C.I.E., S. P. James, J. G. Jordan, H. Kirkpatrick, J. C. G. Kunhardt, Clayton Lane, W. B. Lane, C.I.E., C.B.E., R. A. Lloyd, D.S.O., J. Masson, F. O. N. Mell, C.I.E., C. W. F. Melville, A. Miller, R. K. Mitter, T. R. Mulroney, F. O'Kinealy, C.I.E., C.V.O., E. J. O'Meara, O.B.E., S. E. Prall, R. H. Price, N. Rainier, Sir J. R. Roberts, C.I.E., Sir L. Rogers, C.I.E., E. R. Rost, O.B.E., R. D. Saigol, W. S. J. Shaw, G. M. C. Smith, C.M.G., H. Smith, C.I.E., R. F. Standage, C.I.E., R. Steen, A. Street, C. Thomson, W. H. Thornhill, J. N. Walker, J. H. Tull Walsh, H. J. Walton, D. P. Warliker, J. W. Watson, C.I.E., H. G. L. Wortabet, A. C. Younan.

Majors: H. C. Brown, C.I.E., A. Cameron, O.B.E., R. C. Clifford, D.S.O., M.C., T. A. Hughes, N. H. Hume, R. B. Lloyd, G. R. Lynn, D.S.O., P. S. Mills, A. C. Munro, K. S. Thakur, A. G. Tresidder, R. T. Wells, M. F. White, O.B.E.

Captains: J. W. F. Albuquerque, P. Basu, G. Covell, M. M. Khan, C. McIver, G. R. McRobert, D. R. Thomas.

The guests were representatives of the *British Medical Journal* and the *Lancet*.

Medico-Legal.

TUBERCULOUS INFECTION IN A HOUSE.

A RECENT judgement of Mr. Justice McCardie has an interesting medico-legal aspect. The lessor of a furnished house was mulcted in damages for the breach of an implied warranty that it was reasonably fit for habitation, the breach consisting of the fact that a person suffering from pulmonary tuberculosis had been living in the house up to six weeks before the lessee entered.

It appeared that the plaintiff, Mr. B. M. Collins, entered the house on October 26th, 1922, but on the following day he discovered that the husband of the defendant, Mrs. E. Hopkins, while suffering from pulmonary tuberculosis, had lived in the house until September 11th, 1922, when he went to Switzerland for treatment. The plaintiff at once repudiated the agreement of tenancy and quitted the house on the ground that it was infected with tubercle bacilli and therefore was not reasonably fit for habitation.

As Mr. Justice McCardie pointed out, no warranty of fitness is implied in the letting of an unfurnished house, though there is a statutory exception in respect of working-class dwellings. As to the nature and extent of this warranty in law, he cited two cases where the tenant had been held to be justified in repudiating the tenancy of a furnished house—in the first case because the house was infected by insects, and in the second case because the tenant had heard before his tenancy commenced on March 28th that a child suffering from measles had been living in the house from March 10th to March 19th. It will be observed that some nine days elapsed between the departure of the infected person from the house and the arrival of the new tenant in the measles case, whereas some six weeks elapsed between the departure of Mrs. Hopkins's husband from the house and the arrival of Mr. Collins, the new tenant in the case before Mr. Justice McCardie. In the measles case Mr. Justice Field held that the tenant was entitled to repudiate because (1) the best disinfecting processes had not been used, and (2) the house was not free from infection on March 28th. Mr. Justice McCardie spoke of the implied warranty as one "which tends to the public good and the preservation of public health," and one to be extended rather than restricted. Construing the phrase "fit for habitation," he said that in the case of unclean furniture, or defective drains, or a nuisance by vermin, there was not, as a rule, much difficulty. The eye or the nostrils could detect the fault and measure its extent. But in the case of a house lately occupied by a person suffering from an infectious disease the eye and other senses were of no avail. Yet a peril was none the less grave because it was hidden. Mere apprehension or dislike of a house because a person had died there of small-pox or scarlet fever was not sufficient. "Was there an actual and appreciable risk to the tenant, his family, or household, by entering and occupying the house in which the infectious disease had occurred?" The answer to this question depended upon (1) the nature of the disease; (2) the degree and persistence of its infectivity; (3) the date when the sufferer lived in the house; (4) the steps taken to prevent the risk of infection.

Speaking of the dangers of the tubercle bacilli, Mr. Justice McCardie said:

"I doubt whether the terrible prevalence of consumption in this country is fully realized. One person in seven dies from it. In recent years science has made rapid progress. Yet up to the day of the trial before me the medical profession had failed to find a serum that would prevent the assaults of infection or a drug that would kill the germs of the disease. Now what is the cause of this terrible measure of suffering and death from consumption? The answer is infection. It is clear that pulmonary tuberculosis in the adult (which causes nearly 80 per cent. of the deaths from all forms of tuberculosis) is the result of infection through direct or indirect contact with human beings already suffering from the disease. All infection is caused by tubercle bacilli. The sputum or other ejection from the mouth of the sufferer may fix on and adhere to the walls or the floors or carpets or rugs, curtains, cushions, bedding, coverings, or any kind of article. I feel no hesitation in coming to the conclusion that a large number of persons are infected by other means than personal association with those who suffer from the disease. If the sputum be allowed to dry, then the bacillus may preserve its virulence and capacity for six months. It can, however, be destroyed in a few days or even hours by open exposure to the direct rays of the sun, and several antiseptics are fatal to it. I should add that I am satisfied that if the bacilli are only exposed to the light and air of an ordinary room (that is, apart from direct sunlight) their life and danger may last for five or six months."

As we have seen, the last date on which the sufferer occupied the house was about six weeks before the date fixed for the entry of the plaintiff, and, as the learned judge accepted the evidence of one of the plaintiff's witnesses that the house was "one of the dustiest and dirtiest he had ever seen," thus negativing the contention that it had been cleansed, and, added to this, was satisfied that "if the bacilli are only exposed to the light and air of an ordinary room their life and danger may last for five or six months," his conclusion follows: "that there was a substantial risk that the house and its contents were so infected with tubercle bacilli on October 26th, 1922, as to constitute an actual danger to the plaintiff and his household," and "to render it unsafe for occupation."

Mr. Justice McCardie commented upon the omission of the medical attendant, through an oversight, to notify the case to the medical officer of health. Also it was, said the learned judge, a matter of regret that after the husband's departure for Switzerland no doctor visited the house or gave any directions or advice as to the needs and methods of disinfection.

The duty of medical practitioners to notify tuberculosis is laid down in the Public Health (Tuberculosis) Regulations, 1912, Article V, whilst the duties devolving upon the medical officer of health upon the receipt of such notification are laid down in Article XII—that is, that he "shall make such inquiries and take such steps as are necessary or desirable for investigating the source of infection, for preventing the spread of infection, and for removing conditions favourable to infection"

It may be presumed that if the medical attendant in this case had notified the disease, then the machinery set up by these Public Health (Tuberculosis) Regulations would have been put in motion, and the house and its contents cleansed and disinfected before the plaintiff entered into occupation.

PROSECUTION UNDER THE MEDICAL ACT.

A MAN named William Lumsden was charged before the Bradford stipendiary magistrate on June 15th, on seven summonses, with falsely pretending to be a bachelor of medicine. Defendant pleaded guilty. According to the *Yorkshire Post* of June 16th, Mr. Ross Pashley, who prosecuted on behalf of the Director of Public Prosecutions, said that the defendant had been a medical student at Edinburgh, but did not pass his final examination. From 1913 to 1915, representing himself to be a registered medical practitioner, he acted as locumtenent to a medical practitioner in Bradford. He then went to sea as a surgeon. In 1916 he applied to the General Medical Council for a certified copy of the entry in the *Register* of William Lumsden (a registered medical practitioner who had no connexion with defendant). As the General Medical Council had at that time no specimens of signatures of practitioners registered in Scotland, a copy of the entry was sent to the defendant. From 1920 to 1923 he again acted as locumtenent in Bradford, and had signed seven death certificates, putting his qualification as M.B. When interviewed by a detective he produced the certified copy of the entry which he had obtained from the General Medical Council. Mr. Pashley pointed out that the case was serious, because of the danger to the community. The stipendiary magistrate said that it was of the first importance that death certificates should be given by properly qualified and registered persons. He imposed fines and special costs amounting to a total of £106 15s.

Dr. William Lumsden, *M.C.*, M.B., C.M. Aberdeen, D.P.H. St. Andrews, of Darlington, is the only William Lumsden whose name appears on the *Medical Register*. Dr. Lumsden qualified at Aberdeen University in 1897, and served with distinction in the war, in France, and at Salonica, being awarded the Military Cross. He is anxious that his friends should know that he has no association with the person charged at Bradford, who in fact seems to have attempted to personate him.

Universities and Colleges.

UNIVERSITY OF OXFORD.

AT a congregation held on June 21st the degree of Bachelor of Medicine (B.M.) was conferred on C. R. Lane.

UNIVERSITY OF CAMBRIDGE.

AT a congregation held on June 19th the following medical degrees were conferred:

M.D.—A. A. Prichard, W. T. Beswick.
M.B.—F. E. Higgins.
M.B., B.CH.—J. G. Drew, W. F. T. Adams.

The following candidates have been approved at the examination indicated:

THIRD M.B., B.CH.—*Part I (Surgery, Midwifery, and Gynaecology)*: J. C. Ainsworth Davis, P. E. Bardsley, B. Broadbent, J. T. Burrell, N. E. Chadwick, W. E. F. Davidson, G. S. W. Evans, M. W. H. Evans, L. S. Fry, T. S. Goodwin, C. J. P. Grosvenor, H. E. Harris, G. T. Henderson, E. G. Holmes, J. W. W. Jepps, A. H. Johns, L. P. Lockhart, C. A. Lupton, R. J. Lythgoe, G. C. Millis, A. C. Mowle, E. B. Murrell, L. R. W. Price, R. J. V. Pulvertaft, J. Russell, C. E. G. Smith, R. W. Smith, J. D. M. Stewart, J. H. G. Thompson, E. B. Weaver-Adams, M. H. Webb-Peploe, R. Whillis, L. E. H. Whitby, R. N. P. Wilson. Women: G. M. Brown, M. E. Kennedy. *Part II (Medicine, Pathology, and Pharmacology)*: B. Broadbent, E. B. Brooke, G. H. Caiger, B. H. Cole, G. K. Cooper, E. J. Crisp, W. E. F. Davidson, W. Edwards, L. E. Frazer, L. B. Hartley, L. Lawn, S. Orchard, A. V. Pegge, L. R. W. Price, J. Russell, J. M. Scott, A. G. Story, C. Sturton, E. Tagoe, C. G. Taylor, G. D. Thomson, A. S. H. Walford, L. E. H. Whitby, R. N. P. Wilson. Women: M. E. Kennedy.

UNIVERSITY OF LONDON.

AT a meeting of the Senate held on June 20th Mr. H. J. Waring, M.S., F.R.C.S., was re-elected Vice-Chancellor for the year 1923-24.

Professor Frederick Wood Jones, D.Sc., M.B., B.S., was appointed as from September 1st next to the University Chair of Anatomy tenable at St. Bartholomew's Hospital Medical College. He has been Demonstrator in Anatomy at the London Hospital, Senior Demonstrator and Lecturer in Anatomy at Manchester, Senior Demonstrator in Anatomy at St. Thomas's Hospital, and head of the Department of Anatomy at the London School of Medicine for Women. Since 1919 he has been Professor of Anatomy in the University of Adelaide.

Mr. R. J. S. McDowall, M.B., Ch.B., D.Sc., was appointed as from August 1st next to the University Chair of Physiology tenable at King's College. During the war he served in the R.A.M.C. with the Egyptian Expeditionary Force. He has been Lecturer in Physiology at Edinburgh, and since 1921 he has been Lecturer in Experimental Physiology and Experimental Pharmacology at Leeds.

Mr. Gilbert Stead, M.A., was appointed as from August 1st next to the University Readership in Physics tenable at Guy's Hospital Medical School.

UNIVERSITY OF DURHAM.

THE following candidates have been approved at the examination indicated:

THIRD M.B., B.S.—*Materia Medica, Pharmacology and Pharmacy; Public Health; Medical Jurisprudence; Pathology and Elementary Bacteriology:* *C. C. Ungley, *E. V. Griffiths, *Charlotte B. Schofield, C. W. Arnot, D. R. F. Bertram, F. H. Blackburn, A. Brodie, J. Brown, A. Charlton, Nora E. Coltman, N. Davison, J. W. Dickinson, D. Ewart, J. R. Garson, A. Gray, J. T. Holliday, A. H. Holmes, S. Hughson, Marjory G. T. Jacks, M. H. Jones, B. Kaplansky, H. Levy, F. Lishman, D. W. McLaren, R. A. Pallister, Ethel G. Potts, A. Purvis, S. C. Stonier, W. Toward, W. S. Walton, R. Wear, J. Y. Woodhouse.

* Second class honours.

UNIVERSITY OF MANCHESTER.

THE Council, on June 20th, appointed Mr. H. S. Raper, C.B.E., D.Sc., M.B., Ch.B., as Brackenbury Professor of Physiology and director of the physiological laboratories as from September next. Dr. Raper is at present professor of physiology and biochemistry in the University of Leeds. During the war he was engaged in research work on protection against poison-gas, and from 1918 was head of the Anti-Gas Department, with control of the factories in which respirators were made.

The Council have accepted with regret the resignation of Dr. A. M. Mitchell, lecturer in vaccination.

The following appointments have been made: Clinical Lecturer in Ophthalmology, Mr. T. M. Bride; Assistant Lecturer in Anatomy, Dr. David Stewart; Demonstrators in Anatomy, Dr. G. V. Ashcroft, and Miss Eugenia R. A. Cooper, M.B., Ch.B.

Dr. W. H. Wood has been appointed Tutor and Secretary to the Faculty of Medicine.

UNIVERSITY OF LEEDS.

DR. JOHN KAY JAMIESON, Dean of the Faculty of Medicine and Professor of Anatomy, University of Leeds, has been appointed Pro-Vice-Chancellor of the University for two years, in succession to Professor Smithells.

UNIVERSITY OF BRISTOL.

THE following candidates have been approved at the examinations indicated:

FINAL M.B., CH.B.—*Part I, including Forensic Medicine and Toxicology:* E. R. Clutterbuck, E. B. Eedle, J. A. James, F. G. Jenkins, F. Langford, G. S. Mundy, A. S. Prowse. *Part I only:* R. H. Dummett, K. F. Platt. *In Forensic Medicine and Toxicology only:* Helen M. Dixon. *Part II:* *F. H. Bodman, *Constance L. Griffiths, Dorothy Staley, Idris Williams.

* With second-class honours.

UNIVERSITY OF GLASGOW.

AT the summer graduation ceremony which took place on June 21st a number of distinguished graduands were presented for honorary degrees in various departments. Amongst those who received the degree of LL.D. (*honoris causâ*) from the Principal, Sir Donald MacAlister, were the following members of the medical profession: Sir Walter Morley Fletcher, K.B.E., D.Sc., M.D., F.R.C.P., F.R.S., Secretary of the Medical Research Council; Graham Lusk, Ph.D., D.Sc., F.R.S.E., Professor of Physiology in Cornell College, New York; Andrew Maitland Ramsay, M.D., F.R.F.P.S.G., ophthalmic surgeon, Glasgow, and formerly lecturer in diseases of the eye in the university.

The following degrees were also conferred:

M.D.—*Grace H. Anderson, †J. B. D. Galbraith, †B. S. Nicholson, ‡Lydia I. H. Torrance, C. Averill, A. D. Blakeley, L. L. Fyfe, A. Macphail, J. M. Melvin, G. W. Ronaldson.

* With honours. † With high commendation. ‡ With commendation.

UNIVERSITY OF DUBLIN.

TRINITY COLLEGE.

AT the later summer commencements in Trinity Term, held on June 23rd, the following degrees were conferred:

M.D. (*honoris causâ*).—W. J. Mayo, E. Hastings Tweedy.

M.D.—H. H. James, G. FitzM. Keatinge.

M.B., B.CH., B.A.O.—A. Asherson, J. C. Byrne, E. G. Copeland, A. Darlington, R. A. Deuch, W. S. Dixon, Dorothy C. H. Dorman, Alice M. A. Downing, F. T. Easby, B. W. D. Fayle, A. V. Foster, T. Freedman, S. D. Gabbé, J. A. Gaynor, C. Gordon, R. C. L. Griffiths, P. J. Grobler, H. L. Hanna, L. Heyman, R. L. Hill, W. T. Hogan, W. E. Hutchinson, R. T. Jackson, M. Jaffe, H. Kohlberg, J. Kruger, H. Lewin, C. T. MacCarthy, H. M. Martin, V. O. McCormick, R. S. M'Elroy, B. Morris, S. Narunsky, J. M. O'Connor, F. J. O'Meara, L. Phillips, R. A. D. Pope, H. S. Roseman, Marjorie F. Sibthorpe, F. W. G. Smith, P. F. H. Wagner, J. R. Wills, T. G. Wilson, Wilfred E. C. Wynne, Maria E. Wagener (*in absentiâ*).

LICENTIATE IN MEDICINE, SURGERY, AND OBSTETRICS.—W. L. Duncan.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AT the recent primary examination in anatomy and physiology for the Fellowship 134 candidates presented themselves, of whom 42 were approved and 92 were rejected. The following are the names of the successful candidates:

W. S. Adams, R. M. Ainsworth, G. Armitage, R. M. Bates, C. E. Beare, C. M. Brophy, C. J. O. Brown, C. M. Carruthers, J. Carver, E. T. Cato, Violet H. Comber, C. H. Corbett, J. Dreadon, Georgiana M. Duthie, N. L. B. V. Eckhoff, J. T. Fathi, R. A. Fitzsimons, S. J. P. Gray, R. V. Hennessy, R. V. Hudson, A. E. John, P. J. Jory, C. A. King, P. B. Kittel, R. C. B. Macrae, R. H. Metcalfe, B. S. Nat, J. B. Oldham, F. G. Ormerod, C. Panchalingam, G. H. Pfeiffer, R. Pilot, L. S. Potter, I. Price, D. E. Ross, H. J. Seddon, H. R. Segar, Beatrice G. Smith, H. B. Stallard, F. H. A. Walker, C. A. Wells, and E. F. Wilson.

Medical News.

THE Albert Medal of the Royal Society of Arts has been awarded in duplicate to Major-General Sir David Bruce, K.C.B., D.Sc., LL.D., F.R.C.P., F.R.S., and to Colonel Sir Ronald Ross, K.C.B., K.C.M.G., D.Sc., LL.D., M.D., F.R.C.S., F.R.S., in recognition of the eminent services they have rendered to the economic development of the world by their achievements in biological research and the study of tropical diseases.

STATISTICS of the sanitary conditions among the Jews in Russia and an account of the activities of the O.Z.E. (Society for Preserving the Health of the Jews) were given by Dr. M. Schwartzman at a recent meeting of Jewish doctors at Jews' College. The civil war and the social revolution resulted in complete economic ruin, in which the Jews were the principal sufferers. The rate of mortality was computed at 80 per 1,000, and in some places it reached 150–200 per 1,000. The rate of births sharply declined. Dr. Schwartzman's address had for its object the stimulation of interest in the O.Z.E. organization. Started before the war with the object of stemming the effects of economic and political persecution on the physique of the Jewish masses, it had established before the revolution a network of institutions, hospitals, sanatoriums, open-air colonies, and the like, and had developed physical culture and sanitary education. Between 1914 and 1918 the O.Z.E. was at work in 218 localities, had 105 hospitals and 190 sanitary establishments, and was taking care of 90,000 children. The budget of the O.Z.E. in these three years exceeded £500,000. A resolution was passed to establish in London an organization in support of the O.Z.E. Mr. A. H. Levy, F.R.C.S., was elected chairman of the committee which will be in charge of the work of the organization. Dr. Redcliffe N. Salaman, who presided at the meeting, read a number of messages containing expression of support and sympathy. Among these were letters from Lord Robert Cecil, Mr. Ramsay MacDonald, Sir Sydney Russell-Wells, Sir Frederick Mott, Dr. Charles Myers, and Professor Zeligman.

THE annual meeting of the Dutch Pediatric Society was held at Groningen on June 9th and 10th, when the following papers were read: Etiology and clinical aspects of rickets, by J. Haverschmidt; pathogenesis of rickets, by J. Gorter; lipodystrophia progressiva and osteopsathyrosis, by E. S. Frank; the result of the Albee-Halsted operation, by G. J. Hoet; treatment of pertussis by vaccine, by J. H. van der Starp; and two cases of leukaemia, by B. E. J. H. Becking.

ACCORDING to the annual report for 1922 of the Manchester Babies' Hospital, 253 children were in the hospital during the year. The greatest number of admissions was in the fourth month, and over 50 per cent. of admissions of all cases under one year were in the third, fourth, and fifth month. Of the 206 cases discharged during the year, 142 were discharged improved in health, 6 were discharged on transfer to other hospitals, 14 for other reasons, and there were 44 deaths. Nursing mothers were established in the hospital for the first time during the year, and it was found that they yielded from 27 to 31 oz. of milk a day in addition to their own children's feeds. During the previous four and a half years only 22.2 per cent. of premature infants had survived; since the employment of nursing mothers 64.7 per cent. of the premature infants fed lived.

A STUDY tour—the seventeenth *Voyage d'Études Médicales*—will take place under the direction of Professor Paul Carnot and Dr. Rathery, of Paris, from September 9th to 22nd. In fourteen days visits will be made to the Jura spas (La Mouillère, Salins-du-Jura, Divonne), the Swiss universities of Geneva and Lausanne, the Savoy spas (Evian and Thonon, Chamonix, Saint-Gervais, Annec, Aix-les-Bains, Le Revard, Challes, Allevard, Moutiers-Salins, Brides, Pralognan), and the Dauphiné spas (Uriage, Grenoble, and Saint Pierre de Chartreuse, La Motte-les-Bains, La Grave and Le Lautaret). The party will break up on September 22nd at Lyons, after visiting the school of medicine there. This study tour is

exclusively reserved for medical practitioners and medical students; they can, however, up to 15 per cent. of the total, be accompanied by their wives or one of their daughters. The cost of the journey, from the meeting place, Besançon, to the breaking-up place, Lyons, is 790 francs, including all expenses. A 50 per cent. reduction will be granted on the French railways from the frontier station to Besançon, and a similar reduction from Lyons back to the frontier station. Further information may be obtained from Madame Juppé-Blaise, representative of the French spas, at the French Touring Office, 56, Haymarket, S.W.1.

THE annual meeting of the Medico-Psychological Association of Great Britain and Ireland will be held under the presidency of Dr. E. Goodall at the house of the Medical Society of London, 11, Chandos Street, Cavendish Square, W.1, on July 9th, 10th, 11th, 12th, and 13th.

THE Council of the Royal Institute of Public Health has accepted invitations from the mayor and the University of Bordeaux to hold its annual meeting there at Whitsuntide next year. The president will be Viscount Burnham, and the local honorary secretaries, Professor René Cruchet, professor of medicine in the University of Bordeaux, and M. G. Faure, treasurer of the Chamber of Commerce. The meetings will take place in the University. Special arrangements are being made for travelling and hotel accommodation.

DR. S. J. CLEGG, on leaving the post of deputy medical officer of health for Newcastle to take up the duties of medical officer of health for Durban, South Africa, has been presented by his colleagues in the Newcastle Health Department with a pair of binoculars. Dr. Clegg has also received a silver inkstand from the members of the 50th (Northumberland) Sanitary Section, of which he was commanding officer in France.

ERRATUM.

READERS of the JOURNAL are asked to substitute the following for the last seven lines of the paragraph beginning "The remainder of this absorbing report" in the issue of June 9th (p. 988, col. 2):

the whole more efficacious than the mercury vapour lamp or cod-liver oil, especially as regards improvement in general health; but there was an impression that the addition of cod-liver oil to open-air treatment accelerated cure (p. 84). It is important to note that excellent conditions of hospital hygiene in winter, with a diet of high calorie value (Diet I), did not effect a cure of rickets.

Letters, Notes, and Answers.

As, owing to printing difficulties, the JOURNAL *must be sent to press earlier than hitherto, it is essential that communications intended for the current issue should be received by the first post on Tuesday, and lengthy documents on Monday.*

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate with the Office, 429, Strand, W.C.2, on receipt of proof.

IN order to avoid delay, it is particularly requested that ALL letters on the editorial business of the JOURNAL be addressed to the Editor at the Office of the JOURNAL.

THE postal address of the BRITISH MEDICAL ASSOCIATION and BRITISH MEDICAL JOURNAL is 429, Strand, London, W.C.2. The telegraphic addresses are:

1. EDITOR of the BRITISH MEDICAL JOURNAL, *Aitiology, Westrand, London;* telephone, 2630, Gerrard.
2. FINANCIAL SECRETARY AND BUSINESS MANAGER (Advertisements, etc.), *Articulate, Westrand, London;* telephone, 2630, Gerrard.
3. MEDICAL SECRETARY, *Mediocera, Westrand, London;* telephone, 2630, Gerrard.

The address of the Irish Office of the British Medical Association is 16, South Frederick Street, Dublin (telegrams: *Bacillus, Dublin;* telephone, 4737, Dublin), and of the Scottish Office, 6, Rutland Square, Edinburgh (telegrams: *Associate, Edinburgh;* telephone, 4361, Central).

QUERIES AND ANSWERS.

"T. P. G." asks for advice in the treatment of a married woman (2-para), aged 45, who is troubled with a constant sensation of "fluttering" down the course of the left sciatic nerve from the thigh to the calf. There is no pain. It is worse at night, especially if she is tired. Blisters have been tried without benefit.

INCOME TAX.

"I. N.," who holds a resident appointment at a sanatorium, inquires (*a*) whether the cost of removal from one sanatorium to another is an admissible expense, and (*b*) what allowance can be claimed for the use of his car for the purpose of attending committee meetings.

*** (*a*) Nothing is legally due if the removal arises from a change in the appointment held. The expense could be claimed if the removal were from one sanatorium to another of the same authority by that authority's direction. (*b*) No allowance is due for the initial cost of the car—which represents capital outlay—but assuming that attendance at the committee meetings is a part of his duties, "I. N." can deduct the amount of the expense necessary—that is, if he were to go by car, train, tram, etc.—as included in the total cost of running the (private) car.

LETTERS, NOTES, ETC.

MEDICINE AND MEDICINES.

DR. JAMES GARDNER (Burnley) writes: From your review of it Dr. Harry Roberts's book, *A National Health Policy*, must be interesting and worth reading, and I shall get it and read it during my holiday. Your reviewer gives one quotation—"Nine out of every ten bottles of medicine prescribed are entirely useless to the persons taking them, and are known to be useless by the doctors who prescribe them." How does Dr. Roberts know this to be true? He cannot be so intimate with other doctors' practices to know the results of their prescriptions, and if the statement be true of the practice carried on by him and his partners he should say so and not make the sweeping assertion quoted in your review. The matter does not end here, because drugs are noxious articles and cannot pass harmlessly through the body; if they are not useful they are not merely useless but harmful, and a corollary to Dr. Roberts's statement must be that nine out of every ten bottles of medicine are harmful—*minus* the mere placeboes. This is serious from two points: (1) Public finance; (2) our system of therapeutics.

(1) There are 14,000,000 insured persons, and the drug bill is between 1s. 6d. and 2s. per insured person. At 2s. the bill is £1,400,000, and nine-tenths of this amount is £1,260,000, spent on useless and harmful drugs. Or if the figure is 1s. 6d., the amount spent uselessly and harmfully is £945,000. Comment is superfluous.

(2) Dr. Roberts's statement is an indictment of our system of therapeutics. If nine-tenths of our prescriptions are useless, whose is the fault? Our teachers', or ours individually? Some years ago the Royal Colleges in London cut pharmacology out of their examination. Has it been reinstated, or do the Colleges still disbelieve in it? The subject is still taught in universities, but for what purpose should students spend time over a subject if nine-tenths of it be useless, not to say harmful? We talk of the honour and dignity of the profession, and yet we go on prescribing and outwardly professing our faith in the healing virtue of drugs we know to be harmful; to my mind, there is neither honour nor dignity in us if the assertion be true.

Is our system of therapeutics at fault, or have we any system at all? It certainly behoves us to reconsider our position, both on account of the financial aspect and "for the honour and dignity of the profession."

*** The curriculum of the Conjoint Board in England has for many years past included a course of pharmacology and therapeutics; therapeutics was specified as one of the final examination subjects, but pharmacology was included under the head of medicine and therapeutics. In 1919 pharmacology was grouped with materia medica as Part II of the second professional examination of the Board, leaving therapeutics only to be included under medicine in the final examination. It would appear, therefore, that pharmacology has never ceased to be a part of the curriculum but has been a subject of examination with materia medica since 1919.

VACANCIES.

NOTIFICATIONS of offices vacant in universities, medical colleges, and of vacant resident and other appointments at hospitals, will be found at pages 32, 33, 36, 37, and 38 of our advertisement columns, and advertisements as to partnerships, assistantships, and locumtenencies at pages 34 and 35.

A short summary of vacant posts notified in the advertisement columns appears in the *Supplement* at page *288*.

SCALE OF CHARGES FOR ADVERTISEMENTS IN THE BRITISH MEDICAL JOURNAL.

	£	s.	d.
Six lines and under	0	9	0
Each additional line	0	1	6
Whole single column (three columns to page) ...	7	10	0
Half single column	3	15	0
Half page	10	0	0
Whole page	20	0	0

An average line contains six words.

All remittances by Post Office Orders must be made payable to the British Medical Association at the General Post Office, London. No responsibility will be accepted for any such remittance not so safeguarded.

Advertisements should be delivered, addressed to the Manager, 429, Strand, London, W.C.2, not later than the first post on Tuesday morning preceding publication, and, if not paid for at the time, should be accompanied by a reference.

NOTE.—It is against the rules of the Post Office to receive *poste restante* letters addressed either in initials or numbers.